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CITY OF ABERDEEN

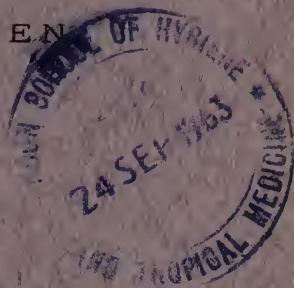


REPORT

BY

JAMES CUMMING, Chief Sanitary Inspector,

For the Year ended 31st December, 1925.





CITY OF ABERDEEN.



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PUBLIC HEALTH DEPARTMENT,
CROWN MANSIONS, 41 $\frac{1}{2}$, UNION STREET,
ABERDEEN, 30th September, 1926.

To

The Scottish Board of Health

AND

The Lord Provost, Magistrates, and
Town Council of the City of Aberdeen.

GENTLEMEN,

I beg to submit the Annual Report of the work done in the Sanitary Inspector's Department during the year ended 31st December, 1925. The Report has been prepared in accordance with the requirements of the Board.

I have again to express my appreciation of the hearty co-operation and valuable services rendered by all the Members of the Staff.

REPORT.

COMPLAINTS.

Undernoted is a tabular statement regarding the number of complaints received, all of which were attended to:—

	Complaints received.	No action necessary.
(a) Choked or defective drains and sanitary conveniences,	754	101
(b) Dampness,	88	24
(c) Want of cleanliness,	284	106
(d) Overcrowding,	201	79
(e) Dwellings infested with vermin,	292	59
(f) Nuisances caused by keeping domestic animals,	187	25
(g) Offensive smells,	147	71
(h) Accumulations of refuse,	187	25
(i) Structural repairs,	1,092	20
(j) Other,	133	58
	<hr/> 3,365	<hr/> 568
	<hr/>	<hr/>

The total number of complaints was 3,365, as compared with 3,254 in the previous year. As has been the case for several years, the largest proportion of the complaints referred to the need for structural repairs.

DRAINAGE.

During the year, the drainage and sanitary arrangements of 51 properties were examined. The owners of these houses were called upon by the Department to carry out the alterations necessary in order to put the premises in accordance with modern requirements. In 35 cases, the work was completed before the end of the year.

Details of the work done are given in Appendix II. (A).

The number of choked drains was 1,057, as compared with 1,180 in the previous year; while the number of choked w.c.'s was 160, as compared with 165. A house factor was fined 20s. for failing to have a choked drain cleared.

Although the number of choked drains requiring to be dealt with is still large, it is gratifying to be able to report that it is considerably less than the average number (1,410) for the preceding six years.

As has been stated in previous reports, there is no doubt that a large percentage of such chokages is due to improper usage on the part of the tenants. Several years ago the Department introduced the policy of sending letters of warning to the tenants in all cases where there was reason to believe that the chokage was due to wilful interference or improper use. During the year, 277 letters were sent.

WATER-CLOSETS AND SINKS.

On 1st September, 1925, a circular was received from the Scottish Board of Health in which they requested that Sanitary Inspectors should, in their Annual Report, give information so far as available regarding—

- (1) The number of common water-closets in use, showing separately the number serving 2, 3, 4, and 5 or more tenants, respectively;
- (2) The number of houses without water supply and sink inside the house; and
- (3) The number of (a) dry closets, (b) privy middens, and (c) ashpits, showing for each separately the number serving 2, 3, 4, and 5 or more tenants, respectively.

In the circular referred to the Board urged all Local Authorities who had not already done so to review the conditions of their areas in regard to the aforementioned matters as soon as possible, with the view of making fuller use of their powers to require the introduction, wherever practicable, of water and water-closets into those houses which are, at present, without these.

Prior to the circular being received, a survey had been made of all tenemented properties in the City, and particulars obtained of the number of dwelling-houses in each property, the number of adults and children living therein, and the number and situation of the water-closets and sinks. This was done with the view of enabling the Department, so soon as circumstances permitted, to deal with all properties where the number of w.c.'s and sinks was inadequate.

W.C.'s.

The following table gives information regarding the common w.c.'s provided for the various numbers of tenants in each property:—

Number of w.c.'s used by not more than			
Two tenants.	Three tenants.	Four tenants.	Five or more tenants.
1,524	1,685	968	592

Sinks.

The number of houses in tenemented properties without sinks inside the houses is 6,318. In 5,530 of these houses the water supply is obtained from one or more common sinks in the stair landings, and in the remaining 788 houses the only water supply available is from water taps provided in the back courts.

My predecessor, immediately after his appointment in 1882, commenced to enforce the powers contained in a Local Act under which the owner of every house was required to fit up a sink in some window recess, or other well-lighted and ventilated place, and in the case of houses occupied by separate families on separate floors, to fit up a sink in a similarly suitable place on each floor of such house.

The Burgh Police Act, which enables a Local Authority to require the owner of every house, or part of a house occupied by a separate family, to fit up a sink therein, did not come into operation until 1892. By that time a considerable number

of properties had been provided with sinks on each floor of the house. Up to 1914 this policy was continued, and there is consequently a fairly large proportion of houses in the City where the water supply is obtained either from sinks on the stair landings or from water taps immediately adjacent to the property.

In December, 1922, the Medical Officer of Health and myself reported to the Town Council that there were 1,099 houses in the City which were unfit for human habitation. In addition to being defective in other respects, all these houses were inadequately provided with w.c.'s and sinks.

A slum clearance scheme has recently been approved of by the Board of Health, and under this scheme, 317 of these houses will be demolished. As regards the remaining 782 houses, the condition is such as justifies closure as soon as alternative accommodation can be provided. It is, therefore, not proposed—at any rate, meantime—that additional w.c.'s or sinks should be provided for such houses. Steps are being taken to ensure that these houses are kept in a reasonable state of repair, but it is considered that if the Department were to insist upon the provision of adequate sanitary conveniences, such a policy would create difficulties in the subsequent closure of such houses.

About eighteen months ago, arrangements were made to serve notices upon the owners of all properties where the provision of water-closets and sinks was inadequate, and a considerable number of notices have been issued. This policy will be steadily continued until all the worst properties have been dealt with.

There is, however, in the City a number of properties where the proportion of w.c.'s is only one to five or more tenants. The total number of occupants in each of these properties is, however, small. These houses consist mainly of one room—the remainder being of two rooms—and are occupied by elderly married couples or by spinsters. The properties in which these houses are situated are in good condition and in a good locality, and could best be utilised by being converted into dwellings of two or three rooms with a w.c. and sink for the use of each house. It is, therefore, not intended meantime to deal with properties of this class, but whenever the opportunity arises, to communicate with the owners with the view of converting the properties into dwellings of not less than two rooms, each with the necessary sanitary conveniences.

Dry Closets, Privy Middens, and Ashpits.

Undernoted are particulars regarding the above:—

Dry Closets.

Total number, 115. Number serving one tenant, 90; number serving two tenants, 9; number serving three or more tenants, 16.

Privy Middens.

Total number, 14. Number serving one tenant, 14.

Ashpits.

Total number, 30.

All the dwelling-houses in connection with which there are dry closets or privy middens are situated in the outskirts of the City, and in districts in which there are neither water mains nor sewers. Recently, water mains have been laid in some of these districts, and although there are no sewers in the vicinity of the houses, steps are being taken to have cesspools constructed, w.c.'s provided, and sinks fitted up in all the houses which are of such construction and in such a condition as would justify such a step being taken.

There is, however, a number of small cottages where the ceilings are low, and the light and ventilation inadequate, so that nothing short of reconstruction would render such houses fit for human habitation. As these houses are mainly situated in districts where recently a considerable amount of feuing has taken place, the owners would readily demolish the houses if alternative accommodation could be found for the tenants. In any case where this was not done by the owner, the houses could be dealt with by Closing Order, but again lack of alternative accommodation prevents this being done meantime.

In addition to the aforementioned properties, there is a large number of houses situated in the Fishers' Squares, Footdee, and the great majority of these houses are not provided with sinks or w.c.'s.

The seriously insanitary condition of these Squares has been the subject of numerous reports by the Public Health Officials, commencing with a report in 1883. In June, 1914—shortly after my appointment as Sanitary Inspector—I served a notice on the owner of every house that was without proper sanitary conveniences, calling upon him to have the necessary conveniences provided. As none of the owners had taken any steps in this direction, the Medical Officer of Health and myself, in September, 1914, recommended to the Public Health Committee that authority should be given to enforce these notices. The Town Council resolved that a remit be made to the Public Health Committee to take such steps on the part of the Council as may be competent and necessary, with the view of remedying the present insanitary condition of the dwelling-houses. At the following meeting of the Town Council it was further resolved that it be an instruction to the Public Health Committee to take no action in the direction indicated in the resolution referred to without first presenting for the approval of the Council a full report as to the steps proposed and the cost falling on the individual proprietors involved. On account of the War, however, no further action was then taken.

On 9th December last, the following report was submitted to the Public Health Committee by the Medical Officer of Health and myself:—

Gentlemen,

Fishers' Squares, Footdee.

We beg to refer the Committee to the reports of the Medical Officer of Health and Sanitary Inspector of 7th December, 1900; of 10th January, 1906; and of 16th September, 1914, regarding the sanitary condition of the Fishers' Squares at Footdee.

The sanitary condition of the Squares was fully described in these reports, and may briefly be summarised as follows:—

The Fishers' Squares consist of three contiguous squares, viz., the North Square, the South Square, and Pilots' Square, with a row of houses across the middle of the South

Square, known as the Middle Row. The total number of dwellings composing the Squares and Row is 160, of which 53 are one-roomed, 74 are two-roomed, 17 are three-roomed, and 16 are four-roomed. The total number of persons occupying the various houses is at present 598.

The sanitary arrangements of the houses are extremely unsatisfactory, and ought, in the interests of the health of the whole community, and particularly of the inhabitants of the Squares, to be remedied forthwith. The chief sanitary defects are the great lack of water-closet accommodation and adequate supply of sinks with the necessary drainage system.

Of the 160 dwellings, only 27 are provided with adequate sink and water-closet accommodation.

In 31 dwellings, the occupants have got the use of a sink, but have no water-closet accommodation.

In 6 dwellings, the occupants have got the use of a water-closet, but have no sink accommodation.

In 96 dwellings, the occupants have not got the use of either a water-closet or a sink.

There is also a great deficiency in proper wash-house accommodation.

The owners of the houses are, in many cases, the occupants, and are persons of small means. This has been the main obstacle in the carrying out of the desired sanitary improvements. There is also difficulty in regard to the finding of suitable sites for water-closets and wash-house accommodation, on account of the irregular way in which the ground in the middle of the Squares has hitherto been utilised for temporary erections by the owners of the houses, and also because of the ground belonging in part to the Town Council and not being wholly at the disposal of the owners of the houses.

The houses originally composing the Squares were built by the Town Council for the accommodation of the fishermen, but were subsequently sold, between the years 1870 to 1881, to the occupiers or others, the price being paid by a series of yearly instalments which came to an end in 1892.

In former years a notice was sent by the Sanitary Inspector to the owner of every house in the Squares that is without proper sanitary conveniences, calling upon him to have the necessary conveniences provided.

No such notice has been served since June, 1914, and before any such notice is served, we would recommend that a Sub-Committee be appointed to consider the sanitary condition of the Squares, to confer with the owners, and to report to the Town Council on the best method of putting the sanitary condition of the Squares on a satisfactory footing as soon as practicable.

We are, Gentlemen,

Your obedient servants,

(Signed) J. PARLANE KINLOCH,
Medical Officer of Health.

(Signed) JAMES CUMMING,
Sanitary Inspector.

A Sub-Committee was appointed for the purpose indicated in the report.

HOUSING.

New Houses.

Owing to labour difficulties, the last development of the 1919 Housing Scheme (the Torry Scheme) is not yet completed, but it is expected that these houses will be ready for occupation in the near future. The total number of houses included in

this scheme is 242. Twenty three-roomed houses are, under the Housing Act, 1924, being erected on the same site.

At Hilton, 300 three-apartment houses are in course of construction, and some of these are now in occupation. The contractors are under an obligation to complete the whole contract by August, 1927.

In April last the Town Council resolved, as an experiment, to erect 40 houses of timber construction with asbestos slated roofs, each house consisting of three rooms. The estimated cost of these houses is about £420.

The only other houses erected by the Town Council are the 48 two-roomed houses at Cattofield. These houses were originally intended for the use of the occupants to be displaced by the Slum Clearance Scheme, but were subsequently made available as additional houses for the working classes under the 1923 Housing Act.

The total number of houses therefore constructed, or in course of construction by the Town Council under any of the Housing Schemes is as follows:—

Two-roomed.	Three-roomed.	Four-roomed.	Total
48	448	154	650

This number is proportionately much smaller than in any of the larger cities in Scotland. The cost of houses in Aberdeen has been so high that the Board of Health have had difficulty in approving of the proposals of the Town Council. Unfortunately, there has not, so far, been a material reduction in the cost of construction, and this, combined with a scarcity of labour in certain of the building trades, has been the cause of so few houses being erected in the City.

During the year, subsidies under the Housing, &c., Act, 1923, and the Housing (Financial Provisions) Act, 1924, were authorised to builders in respect of 163 houses—4 of which consisted of three rooms, 94 of four rooms, and 65 of five rooms. As has been the case since the War, it is obvious that private enterprise is extremely reluctant to provide houses of the smaller size.

Twenty-five houses were erected during the year without any subsidy or loan. Six of the houses consisted of four rooms, 3 of five rooms, and 16 of six or more rooms.

As will be seen from the table given on page 14 regarding “overcrowding,” the number of overcrowded houses is, as is to be expected, increasing annually, and may now be said to have assumed an alarming proportion. In addition, however, to the large number of overcrowded houses, there is a very acute shortage of houses, particularly of houses of two and three rooms. Until recently the Scottish Board of Health have been reluctant to approve of the erection of additional houses having less than three rooms.

In connection with the Slum Clearance Scheme recently approved of by the Scottish Board of Health, permission was given to erect two-roomed houses to the extent of 75 per cent. of the houses to be replaced. There is no doubt that, taking into consideration the circumstances—financial and otherwise—of those occupying

houses in the slum area, this percentage of two-roomed houses is necessary. At the same time, however, there is a great need for the erection of a number of additional two-roomed houses, for the reason that a large percentage of newly married couples are unable to pay the rental required for a modern three-roomed house.

As has been stated in previous reports, the marriage-rate may be taken as some measure of the number of houses that are required annually to meet the needs of the population. Undernoted are particulars as to the number of marriages—in which the male was resident in the City—which have taken place in the City during the period 1916-25.

1916,	.	.	.	.	1,046
1917,	.	.	.	.	820
1918,	.	.	.	.	1,001
1919,	.	.	.	.	1,411
1920,	.	.	.	.	1,427
1921,	.	.	.	.	1,190
1922,	.	.	.	.	1,083
1923,	.	.	.	.	1,073
1924,	.	.	.	.	967
1925,	.	.	.	.	1,020

Average = 1,104.

In addition to these marriages, there must, however, be taken into consideration all the marriages taking place elsewhere than in Aberdeen and in connection with which the home is to be in Aberdeen. It is right to assume that every newly married couple desire to occupy a separate dwelling, but under present conditions a large proportion of such persons have to find accommodation either in furnished lodgings or in the houses of either of their parents.

It is evident, therefore, that, in addition to providing houses to make up for the present shortage, allowance would require to be made for the number of additional houses required annually. During recent years the maximum number of houses erected under Housing Schemes, in the City in any one year, has been 150. Under the Slum Clearance Scheme, alternative accommodation will, for the next five years, require to be provided at the rate of 65 per annum. This means that if the present building capacity cannot be increased, the maximum number of additional houses—*i.e.*, apart from these to be provided under the Slum Clearance Scheme—that can be erected within the next five years will not exceed 85 or thereby.

In Aberdeen very little use has been made, so far, of any of the alternative methods of construction. The distance of Aberdeen from the large centres renders the erection of such houses to be as costly as those erected of stone or brick. The great advantage, however, that would accrue from utilising some of the alternative methods would be that the rate of construction would be greatly accelerated.

Overcrowding.

The following table gives particulars as to the numbers of houses found overcrowded within the past ten years:—

	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	TOTALS
Houses measured,	1,640	1,406	711	609	769	742	792	724	691	639	8,663
Number found overcrowded,	90	106	99	58	130	167	137	170	202	168	1,327
Number where overcrowding was abated,	89	98	82	42	66	78	49	41	64	29	638
Number where overcrowding was not abated, .	1	8	17	16	64	89	88	129	138	139	689
Number where excess was not more than $\frac{1}{2}$ adult, .	22	32	18	12	16	27	18	24	37	29	235
Do. do. 1 ,, .	27	41	50	18	53	54	48	49	54	49	443
Do. do. $1\frac{1}{2}$ adults, .	22	17	15	14	26	36	29	37	38	26	260
Do. do. 2 ,, .	14	11	10	9	17	17	16	26	28	31	179
Do. do. $2\frac{1}{2}$,, .	3	3	3	3	7	15	10	12	19	11	86
Do. do. 3 ,, .	0	2	1	2	5	5	7	13	11	10	56
Do. do. $3\frac{1}{2}$,, .	0	0	1	0	4	7	4	2	8	7	33
Do. do. 4 ,, .	2	0	0	0	1	3	4	1	4	1	16
Do. do. $4\frac{1}{2}$,, .	0	0	1	0	1	1	1	2	2	1	9
Do. do. 5 ,, .	0	0	0	0	0	2	0	2	0	1	5
Do. do. $5\frac{1}{2}$,, .	0	0	0	0	0	0	0	2	1	0	3
Do. do. 6 ,, .	0	0	0	0	0	0	0	0	0	2	2

It will be observed that during the past year the number of overcrowded houses discovered was 168, and in only 29 of these has it been possible, up to the time of writing, to abate the overcrowding. The number of houses where the excess was greater than two adults was 33. In two cases the excess was as great as 6 adults.

In former reports I have given details as to the gross overcrowding which is prevalent.

Undernoted are particulars as to some of the worst cases discovered in 1925:—

(1) In a one-roomed house there were living the father, mother, four daughters aged, respectively, 14, 11, 10, and $\frac{1}{2}$ years, and two sons aged, respectively, 5 and $2\frac{1}{2}$ years—a total of $6\frac{1}{2}$ adults, whereas there was accommodation in the house for 2 adults only.

(2) In a two-roomed house there were living the father, mother, two sons aged, respectively, 16 and 7 years, and six daughters aged, respectively, 14, 11, 9, 5, 2,

and 1 years—a total of $7\frac{1}{2}$ adults, whereas there was accommodation for 4 adults only.

(3) In a two-roomed house there were living the father, mother, three daughters aged, respectively, 17, 15, and 11 years, and five sons aged, respectively, 13, 9, 5, 2, and 5-12th years—a total of 8 adults, whereas there was accommodation for $4\frac{1}{2}$ adults only.

(4) In a two-roomed house there were living the father, mother, four sons aged, respectively, 16, 5, 3, and 1 years, and four daughters aged, respectively, 18, 14, 12, and 7 years—a total of 8 adults, whereas there was accommodation for $4\frac{1}{2}$ adults only.

(5) In a three-roomed house there were living the father, mother, six sons aged, respectively, 18, 16, 15, 10, 4, and 1 years, and four daughters aged, respectively, 21, 12, 6, and 2 years—a total of 10 adults, whereas there was accommodation for 7 adults only.

(6) In a sub-let room there were living the father, mother, two sons aged, respectively, 10 and $1\frac{1}{2}$ years, and a daughter aged 4 years—a total of 4 adults, whereas there was accommodation for 1 adult only.

(7) In a two-roomed house there were living the father, mother, two daughters aged, respectively, 25 and 7 years, and four sons aged, respectively, 17, 6, 4, and 1 years—a total of 6 adults, whereas there was accommodation for 3 adults only.

(8) In a two-roomed house there were living the father, mother, three sons aged, respectively, 14, 12, and 6 years, and a daughter aged 10 years—a total of $5\frac{1}{2}$ adults, whereas there was accommodation therein for $2\frac{1}{2}$ adults only.

(9) In a two-roomed house there were living the father, mother, five daughters aged, respectively, 20, 17, 15, 13, and 2 years, and five sons aged, respectively, 18, 11, 9, 6, and 1 years—a total of 10 adults, whereas there was accommodation for 8 adults only.

(10) In a two-roomed house there were living the father, mother, five sons aged, respectively, 21, 13, 9, 6, and 1 years, and four daughters aged, respectively, 16, 15, 11, and 3 years—a total of 9 adults, whereas there was accommodation for 7 adults only.

In all the afore-mentioned cases efforts to obtain a larger house have failed, and the houses are still overcrowded to the extent indicated.

(11) In a two-roomed house there were living the father, mother, five sons aged, respectively, 23, 15, 11, 5, and 2 years, and seven daughters aged, respectively, 27, 25, 21, 19, 17, 13, and 9 years—a total of $12\frac{1}{2}$ adults, whereas there was accommodation in the house for $6\frac{1}{2}$ adults only.

All efforts to obtain a larger house have failed. One of the daughters is now married, and accommodation has been found for two other daughters and a baby boy in a one-apartment house in the vicinity, so that the excess has been reduced to $2\frac{1}{2}$ adults.

(12) In a two-roomed house there were living the householder (a widow), a son aged 14 years, a male adult lodger, a daughter aged 15 years, and a married daughter with five sons aged, respectively, 11, 9, 5, 4, and 3 years—a total of $9\frac{1}{2}$ adults, whereas there was accommodation in the house for $3\frac{1}{2}$ adults only.

The married daughter has been successful in obtaining a house for her family and herself, so that the overcrowding has been virtually abated.

(13) In a two-roomed house there were living the father, mother, five sons aged, respectively, 20, 18, 15, 12, and 2 years, and five daughters aged, respectively, 16, 10, 6, 5, and 4 years—a total of 10 adults, whereas there was accommodation in the house for 5 adults only.

The householder was able to procure a larger house, so that the overcrowding in this case has been abated.

(14) In a two-roomed house there were living two families. The kitchen was occupied by the householder, his wife, a son aged 17 years, and a daughter aged 8 years—a total of $3\frac{1}{2}$ adults, while there was accommodation for $2\frac{1}{2}$ adults only. The bedroom apartment was occupied by relatives—a mother and five sons aged, respectively, 12, 10, 6, 4, and 3-12th years—a total of $4\frac{1}{2}$ adults, whereas there was accommodation for $1\frac{1}{2}$ adults only.

Separate accommodation has now been obtained for the relatives of the householder, so that the overcrowding in this case has been abated.

Structural Defects and Want of Repair.

Particulars as to the work done will be found in Appendix II. (B).

As has been the practice for a number of years, a complete sanitary survey is made of all houses in which a case of tuberculosis has occurred, or to which a person still suffering from that disease has removed.

During the past year, the number of such surveys was 426.

All structural defects and want of repair found in these houses were dealt with. Special attention was paid to the proper ventilation of the sleeping apartments and to their freedom from dampness.

The number of complaints received regarding structural defects and want of repair was 1,092, as compared with 1,035 in the previous year. In only 20 of these cases was it found that there was no cause for complaint. The Inspectors, in the course of the systematic inspection of their district, pay particular attention to these conditions, with the result that every structural defect coming under their notice is immediately dealt with.

As has been stated in previous reports, a large amount of work has been done by the Department in past years in order to secure that the windows of all sleeping apartments can be easily opened for purposes of ventilation. The result has been that there are now comparatively few windows which do not comply with these requirements, so that during the year only 19 sleeping apartments required to be dealt with. In five cases it was found that unsuitable apartments were being used for sleeping purposes, and after notices had been served upon the occupants, the apartments ceased to be used for that purpose. In four sleeping apartments, enclosed beds were opened up.

As can readily be understood, dampness is a frequent source of complaint in the older type of dwellings, and in this connection 159 dwellings were dealt with.

In 53 properties the roof coverings were repaired; in 36, the window rybats re-pointed; in 31, the external walls were reharled or otherwise repaired; and in 39, other remedial measures were carried out.

In the inspection of houses, careful attention is paid to any want of repair. During the past year, the floors of 56 dwelling apartments were repaired, as were also the floors of 148 lobbies and stair landings (including stair steps). In 149 dwelling apartments, 730 lobbies and staircases, 370 water-closets, 202 wash-houses, and 49 pends, the plaster on the walls and ceilings was repaired. The woodwork around sinks was renewed or repaired in 76 houses, 21 defective chimneys and 64 grates or fire-places were repaired; while the doors of dwelling apartments were renewed or repaired in 69 cases.

As was stated in the report for the previous year, it was found that proprietors are prone to allow wash-houses, w.c.'s, and cellars to fall into a state of disrepair. The amount of repairs required in these pertinents of dwelling-houses was slightly greater than in the previous year.

I have again to draw attention to the fact that a considerable amount of the want of repair in a number of houses is due to carelessness or malicious mischief. During the year, 496 windows or roof-lights were reglazed at the instance of the Department, as compared with 627 in the previous year, and 801 in 1923. In a great many cases it is impossible to discover the culprits. It is common knowledge that frequently the damage is not caused by the tenants or their families, but is the result of malicious mischief on the part of young persons in the district. In other cases, however, the damage is undoubtedly caused by the tenants or their families.

Paving of Back Courts and Passages.

There are now comparatively few properties in the City where the back courts are not paved or otherwise suitably surfaced. There is, however, a large number of houses where the passages leading to the outhouses have never been paved, and have been allowed to get into an unsatisfactory condition. During the year, 2 courts and 28 passages were paved, while 49 courts and 43 passages were repaired. The paving of these courts and passages adds greatly to the comfort of the tenants.

Verminous Persons and Houses.

Under the agreement between the Education Authority and Town Council for dealing with verminous persons and houses, 90 families, comprising 535 persons, were removed to the Cleansing Station for treatment. In the previous year the numbers were, respectively, 112 and 751; and in 1923, 78 and 471.

In addition to the foregoing, 43 persons suffering from scabies and 73 verminous persons were treated at the Cleansing Station. These persons belonged to households in which there were no school children, and, therefore, did not fall to be dealt with under the agreement with the Education Authority. In the previous year, the numbers were, respectively, 46 and 51.

The number of bug-infested houses dealt with during the year was 67, as compared with 61 in the preceding year. As stated in previous reports, it is the

practice of the Department to serve notices under Section 40 of the Public Health (Scotland) Act, 1897, on both owner and occupier in all such cases. Along with the notice to the owner is enclosed a letter informing him that if all the paper is removed from the walls and the skirtings and door facings stripped, the Department is prepared to fumigate thoroughly with sulphur all the infested rooms. It is also made a condition that after fumigation all broken plaster should be properly repaired, the woodwork washed with a disinfectant solution which is supplied gratuitously, and the walls distempered in place of being re-papered. The occupier is also informed that if he is prepared to treat all the furniture and furnishings in a similar manner, the Department would supply the necessary disinfectant, and would also remove for steam disinfection all articles of clothing and bedding which could not be boiled.

No difficulty has been experienced in getting either owner or occupier to comply with these directions. This method of dealing with bug-infested houses continues to give very satisfactory results.

Filthy Houses.

During the year, the floors of 111 dwelling apartments, the articles of furniture in 99 apartments, and 99 sets of bed and body clothing were cleaned by the occupants after notices had been served upon them.

There is a considerable number of houses which require to be re-visited frequently in order to ensure that a satisfactory standard of cleanliness is being maintained.

I have again to record the great assistance received from the Parish Council, who are ready at all times to admit into their hospital those of the aged and infirm poor who are no longer able to look after themselves or their homes. Immediately after the removal of such cases to hospital, the houses, bedding, and clothing are disinfected by this Department.

Cleansing of Walls and Ceilings of Dwelling Apartments, Lobbies, Staircases, W.C.'s, Wash-houses, &c.

During the year, the walls and ceilings of 109 dwelling apartments were distempered or re-papered. In the previous year the number was 113.

The walls and ceilings of 1,593 lobbies and staircases, 467 passages or pends, 3,487 water-closets, 1,783 wash-houses, and 58 drying-lofts were whitewashed or otherwise cleaned. In the previous year, 1,704 lobbies and staircases, 502 passages or pends, 3,390 water-closets, 1,911 wash-houses, and 50 drying-lofts were similarly cleansed.

Proceedings had to be taken against three house proprietors for failing to cleanse common lobbies and staircases. Penalties were inflicted in each case.

Want of Cleanliness of W.C.'s, Lobbies, Staircases, Back Courts, and other parts of Premises used in Common.

During the year, notices were served upon 170 sets of tenants, embracing 960 individual tenants, regarding their failure to clean the parts of the premises used

in common by them. Legal proceedings were instituted in two cases, and in each case convictions were obtained against some of the tenants.

Accumulations of Ashes, Filth, and other Rubbish.

The number of accumulations of ashes, filth, and other rubbish removed was 194, as compared with 264 in the previous year and 274 in 1923.

Letters of warning were sent to 231 householders regarding the throwing of refuse from the windows of dwelling-houses on to back courts or on to ground or outhouses connected with adjoining properties.

Legal proceedings were instituted against a tenant for failing to remove an accumulation of offensive matter from his cellar. After the offensive matter had been removed, the tenant was admonished.

INCREASE OF RENT AND MORTGAGE INTEREST (RESTRICTION) ACTS, 1920 AND 1923.

Applications for Certificates by Tenants.

During the year, only one application for a certificate in terms of Section 2 (2) of the principal Act was received. As the necessary work was completed before the application was considered by the Committee, no further action required to be taken.

Applications for Reports by Landlords.

Section 5 (2) of the 1923 Act provides that where a certificate has been issued by the Sanitary Authority in accordance with the provisions of Section 2 (2) of the principal Act of 1920, and the landlord has executed the repairs required to put the house into a reasonable state of repair he shall be entitled to receive a report to that effect on making application to the Sanitary Authority, and on payment of a fee of one shilling.

One application, in connection with a certificate granted in the previous year, was received. As the necessary repairs had been carried out, the application was granted.

SMOKE ABATEMENT.

During the year, 116 observations were made of the quantities of smoke emitted from the chimneys of factories, and in nine cases letters of warning were sent to the proprietors regarding the excessive emission of smoke. In one case it was considered necessary to institute legal proceedings but the Magistrate held that the charge had not been proved. It is gratifying, however, to be able to report that, although proceedings in this case were not successful, steps have been taken by the management to prevent a recurrence of the nuisance with the result that there is now little cause for complaint.

Owing to the general condition of trade, there have been no instances during the year of total conversion from steam to electricity in any of the factories in the

City, although in several instances the proprietors have made electrical extensions in preference to providing more steam power. On the domestic side, the Electricity Department has again been busy in connection with the provision of electric fires and cookers, and there have been large increases both in the number of appliances hired out and in the units sold for heating and cooking purposes.

Steam wagons travelling within the City continue to be kept under observation, and the number of wagons so dealt with in the course of the year was 3,042, as compared with 2,615 in the previous year. In ten cases, letters were sent to the owners of the wagons to the effect that it was essential to have the amount of smoke reduced to reasonable limits. In one case, proceedings were instituted against the owner and driver of a steam wagon. The court was satisfied that the owner of the wagon was at fault and he was accordingly fined £3. The charge against the driver was departed from.

The railway stations were visited from time to time and communications sent to the manager of the Railway Company regarding excessive emissions of smoke from certain engines. As the result of these warnings, it was found that the nuisance was mitigated to a considerable extent.

OFFENSIVE TRADES.

Slaughter-Houses.

At the end of 1925, there were 5 slaughter-houses in the City, containing 33 slaughter booths, being the same number as in the preceding year.

The premises are kept in good repair and in a cleanly condition.

Other Offensive Trades.

At the end of the year, there were 26 firms in the City who carry on one or more of the businesses set forth in the Public Health Act as coming within the definition of offensive trades.

The following is a list of the offensive businesses carried on:—

Bone Boilers	6	Tripe Boilers	3
Tallow Melters	12	Gut or Tripe Cleaners	4
Skinners or Hide Factors	5	Blood Boilers	3
Knackers	2	Soap Boiler	1
Fish Oil Manufacturers	3	Manufacturer of Albuminoid	
Manure Manufacturers	5	Substance from Fish	1
Fish Meal Manufacturer	1		

Total, 46.

During the year, three applications for sanction to extend existing premises were received. All the applications were granted.

All the premises in which offensive trades are carried on are visited frequently—some of them daily—and the total number of inspections, exclusive of slaughter-houses, was 2,003.

In June and July of last year, there was a renewal of the complaints regarding offensive smells from premises situated in the centre of the City where the businesses of gut cleaning, tallow melting, and bone boiling are carried on. Shortly after this date, the business of tallow melting was removed to premises outwith the City boundary, in which modern apparatus has been installed. Since the transference of this part of the business, there have been no complaints.

On three occasions, the proprietor of a fish oil factory in Palmerston Road had to be communicated with regarding offensive smells which had been observed at a considerable distance from the factory, and which had been complained of.

Complaints were also received regarding offensive smells from a knackery in the west end of the City, and the proprietor had to be communicated with on two occasions.

No complaints were received regarding any of the other premises in which offensive trades are carried on, but offensive smells from several of these premises were observed in the course of the year by the sanitary staff, and on each occasion the proprietors of the works were communicated with.

The fish meal factory in Palmerston Road was visited daily. On only one occasion were smells observed outwith the immediate vicinity of the factory.

On several occasions offensive smells obviously proceeding from Cove Manure Works were observed within the City.

PIG-STYES.

At the end of 1925, there were 64 pig-styes on the register, 10 of these having been licensed under the "Additional Bye-laws" made by the Town Council in 1916. The number on the register in the previous year was 72. To these pig-styes, 219 visits were made in the course of the year in order to ensure that they were being kept in conformity with the Bye-laws.

Details of the work done are given in Appendix II. (D).

WORKSHOPS (EXCLUDING BAKEHOUSES).

The number of workshops (excluding bakehouses) on the register at the end of 1924 was 765. During the year, there were 57 added, 63 closed, and 15 converted into factories by the introduction of motive power. The number therefore at the end of 1925 was 744.

There were 2,405 visits made, and 304 notices were issued with reference to sanitary requirements in connection with these premises.

Two notices were received under Section 5 of the Factory and Workshop Act, 1901, which requires that the Factory Inspector should give intimation to the Local Authority of any sanitary defect in a factory or workshop remediable under the Public Health Act. The notices dealt with dirty walls and ceilings, and a defective w.c.

Notices were served upon the occupiers, and all cause for complaint was removed. Seven notices of occupation were also received from the Factory Inspector.

Inspection of Plans.

The plans of 12 premises were, at the request of the Plans Committee, reported on by the Medical Officer of Health and myself, and recommendations made and agreed to.

The recommendations chiefly referred to the lighting and ventilation of the premises.

Details of the work done are given in Appendix II. (E), and in Appendix IV. is given a list of the workshops as at 31st December, 1925.

DAIRIES, COWSHEDS, AND MILKSHOPS.

At the end of the year, there were 728 persons registered to purvey milk (including ice-cream) within the City. This number includes farmers who, although they have not premises within the City, retail milk from carts. The number shows an increase of 38 as compared with the previous year.

All the dairies and milkshops are regularly visited by one of the assistant inspectors, and the number of such visits during the year was 3,151.

Details of the work done are given in Appendix II. (G).

During the year, an additional licence was granted to a retailer to sell "Certified" Milk. At the end of the year, there were therefore three retailers licensed to sell "Certified" Milk.

Samples were procured from each of these retailers weekly and analysed by the Public Analyst.

Undernoted is a summary of the results:—

Month.	No. of Samples.	Fat Average %.	Month.	No. of Samples.	Fat Average %.
January . . .	7	3·81	July	8	3·77
February . . .	8	3·92	August	9	3·74
March	9	3·92	September . . .	9	4·01
April	9	3·54	October	9	3·86
May	7	3·87	November . . .	13	3·83
June	8	3·89	December . . .	10	4·05

Total No. 106. Fat Average % 3·84.

The samples were also examined by the City Bacteriologist. The results of these examinations are given in the Medical Officer of Health's Annual Report.

No licences have been granted for any of the other grades of milk specified in the Milk (Special Designations) Order.

The number of cowsheds at the end of the year was 19, being the same number as in the previous year. The herds are regularly examined by the Veterinary Inspector, who also looks after the sanitary condition of the premises.

HANDLING OF FOOD.

The Scottish Board of Health directed that the Sanitary Inspector in his Annual Report should include "Observations on food inspection, unsound food, and the sanitary condition of premises where foods are manufactured, prepared, stored, or exposed for sale, indicating any important respects in which existing powers have been found inadequate for dealing with insanitary conditions at such places."

BAKEHOUSES.

The powers of a Local Authority in regard to bakehouses and all premises in which foodstuffs are prepared are contained in the Public Health (Scotland) Act, 1897, and in the Factory and Workshop Act, 1901. These powers are, however, very general in nature. The law requires that every factory and workshop must be kept in a cleanly condition, but no special powers are provided for dealing with bakehouses or other premises where foodstuffs are manufactured. In all such premises it is essential that the floors, tables, shelves, bread boards, trays, baking machines, and all appliances and utensils should be kept in a cleanly condition. In Aberdeen, it has always been the aim of the Department to have the standard of cleanliness in bakehouses as high as practicable, and it is gratifying to report that, generally speaking, our efforts in this direction have met with a good response from the bakers. Details of the work done during the past year are given in Appendix II. (F).

Cleanliness of Floors.

Conditions in this respect have improved considerably within recent years. This is due in large measure to the fact that in a number of bakehouses the dough troughs and similar fittings have been mounted on wheels so as to be readily movable for cleansing purposes. Another important factor in securing the cleanliness of the floors is to see that sufficient space is left between the floor and all fittings which are not movable, in order to ensure that the parts of the floor underneath these fittings can be readily cleaned.

In a number of the bakehouses difficulty has been experienced in getting the cleaning carried out as regularly and as efficiently as is necessary. The employees are disinclined to undertake the cleaning as part of their ordinary work as bakers, with the result that the cleaning is of a spasmodic nature. In other bakehouses, cleaning at the close of the day is part of the routine work.

Cleanliness of Shelves, Cupboards, Baking Appliances, &c.

All shelves and cupboards should be so constructed and situated as to be readily cleaned.

Machines are now used in the greater part of the work formerly done by hand, and the thorough and regular cleaning of all parts of these machines is a matter which demands attention. Our experience is that although little fault can be found

with the manner in which the interiors are kept, considerable improvement in a number of cases could and should be made in connection with the regular cleaning of the external surfaces of baking machines, dough-troughs, and other appliances. No fault can be found with the manner in which the tops of the baking tables are kept, but considerable difficulty has been experienced in some cases in getting the fronts and legs of the tables kept in a satisfactory condition. The difficulty is to impress upon those concerned the danger of contamination through the soiling of the hands of the workers.

Storage Accommodation.

In most bakehouses, there are separate rooms for the purpose of storing flour and other materials, but in some of the smaller bakehouses no suitable provision is made—flour and other articles being stored in the bakehouse—with the result that the regular cleaning of the bakehouse is interfered with. At one time considerable difficulty was experienced in connection with the manner in which such articles as margarine, butter, and liquid eggs were stored. The Department have, however, for some years been impressing upon bakers the necessity of having all receptacles in which such articles are kept provided with proper covers.

Facilities for Personal Ablution.

Facilities for personal ablution are of the utmost importance in the bakehouse. Upwards of thirty years ago wash-hand basins were, at the instance of the Department, provided in all the bakehouses in the City. It must, however, be admitted that in several cases use has not been made of this provision, and several of the wash-hand basins have been allowed to get into disrepair. No power is meantime available for compelling the provision of wash-hand basins, but it will be readily admitted that adequate arrangements for washing the hands of the workers, including the supply of soap and clean towels facilitate cleanliness in bakehouses and other premises where foodstuffs are manufactured.

In the two largest bakeries in the City, baths are provided, and it is gratifying to report that the facilities are appreciated by the workers.

Cloakroom Accommodation.

Good cloakroom accommodation is provided in the more modern bakehouses, and during recent years no opportunity has been lost of urging the proprietors of bakehouses to provide such accommodation whenever practicable.

Medical Inspection of Employees.

Under the Factory Act, all young persons, under 16 years of age, must within 7 days of their employment in a bakehouse be examined by the certifying surgeon appointed under the Act. In the case of adults, however, no medical examination is required. It is desirable that fuller and more specific power should be provided to prevent any employee suffering from any skin affection or other form of contagious disease being employed in the manufacture of bread or other foodstuffs.

Smoking and Spitting.

Smoking while at work should be prohibited in bakehouses and other premises where foodstuffs are prepared. This practice, which is not now common in Aberdeen, is very objectionable, but meantime cannot be prevented by law. A number of years ago printed notices regarding spitting were supplied by the Department, and these are affixed in bakehouses and other factories and workshops.

OTHER PREMISES WHERE FOODSTUFFS ARE PREPARED.

Power to enforce the requirements of bakehouses should be provided in connection with all other premises in which foodstuffs are prepared.

During the war, a number of factories in the City were solely engaged in the preparation of rations for the troops. Each of these premises was visited daily in order to ensure that the articles used were of good quality and that scrupulous cleanliness was observed in every process of manufacture. The standard attained at that time has been of considerable help in enabling the Department to point out to the occupants of other premises what ought to be done, by way of regular cleaning, to prevent contamination of foodstuffs. No difficulty has ever been experienced in connection with any of the larger factories or works, because these are, and can be frequently visited.

There are, however, a very large number of premises in the City, such as small provision shops, where such articles as potted meats, tripe, &c., are manufactured and prepared, fried fish and chip shops, retail premises where confectionery and jam are manufactured, which can only be inspected occasionally, and which in the absence of prescribed powers would require to be visited very frequently before a satisfactory standard of cleanliness could be attained and maintained.

Transport and Distribution.

Methods of transport and distribution could, in many cases be improved upon.

At one time it was quite common in the City to convey bread uncovered on the tops of vans, and to deliver small bread to retail shops in uncovered boards or trays. Owing to changes in the type of van employed, this practice is not so common now-a-days. We occasionally find that the boards in which bread is delivered are dirty, and although we have never experienced difficulty in dealing with such cases, it would be of great advantage to have powers enabling us to deal with the condition of receptacles and vehicles used in the conveyance of foodstuffs. The fishboxes, and the vehicles used in transporting fish also require attention from time to time.

SHOPS WHERE FOODSTUFFS ARE SOLD.

Under a Local Act "every occupier of any premises used for the sale of butcher meat, poultry, game, fish, butter, meal, bread, or any other article of food, who does not keep the same clean and in good condition, is liable to a penalty not exceeding Twenty Shillings."

It has been the practice to have a considerable number of visits paid annually to all such shops. The following Table gives particulars as to the shops visited during the past year :—

Class of Shop.	Number Inspected.	Found Satisfactory.	Found Unsatisfactory.	No. of Defects dealt with.
Bakers	114	84	30	56
Butchers	118	85	33	63
Butchers' Stores . .	58	52	6	11
Confectioners . . .	37	32	5	6
Fishmongers . . .	47	34	13	29
Fried Fish Shops . .	40	25	15	22
Fruiterers	69	48	21	34
Greengrocers . . .	10	10	—	—
Grocers	221	164	57	105
Restaurants . . .	91	83	8	18
Mixed Shops . . .	259	209	50	89
	1,064	826	238	433

Details of the work done are given in Appendix II. (H).

No powers are, however, available for ensuring that articles of food are stored and handled in such a way as would prevent undue contamination. Certain classes of food are commonly exposed in windows and shelves, and are liable to contamination by dust and flies. Within recent years, a large number of shopkeepers have been using glass bottles or cases for storing such articles as confectionery, butter, &c., and this practice deserves to be encouraged and extended. Some manufacturers of confectionery are supplying their goods in boxes provided with covers made of glass or some other suitable material which, while protecting the confectionery from being contaminated by flies and dust, does not interfere with exhibition of the goods. Where such measures have been adopted, it has been found that there has been a very considerable reduction in the number of flies infesting the premises.

Foodstuffs are frequently exposed in boxes and bags deposited upon the floors or pavements at shop doors, and are thus exposed to various kinds of contamination. This practice should be prohibited.

The hands of all persons engaged in the selling of foodstuffs should be kept thoroughly clean. In a large number of shops where foodstuffs are sold, there are no facilities available for the washing of hands, but even where such provision has been made there is meantime no power available to compel its use.

Wrapping of Food.

This is a matter that requires attention. In the majority of shops where such food as meat, fish, and butter are sold, the articles are wrapped in clean paper. With other foodstuffs, however, such as fish and chips, it is quite common to find old newspapers and coloured prints used as wrappers. For certain classes of goods it ought to be made compulsory to use only clean white paper as an internal covering.

Street Contamination.

A fairly large proportion of foodstuffs are sold from barrows and stalls on the street. With such articles as soft fruits which are frequently purchased with the object of being consumed uncooked, the danger of contamination is considerable.

Legislation.

As the result of the putting into operation of the powers contained in the Milk and Dairies (Scotland) Act, 1914, complete control is available regarding the production and sale of milk. As in Aberdeen the manufacture and sale of ice-cream is, by virtue of the powers contained in a local Act, embraced in the legislation applicable to milk, similar powers are available with regard to ice-cream.

There are, however, no corresponding powers available for dealing with other articles of food. It is obvious, therefore, that regulations dealing with the sanitation of *all* premises in which foodstuffs are manufactured, prepared, or sold, and the methods to be adopted in respect to the cleanliness in production, preparation, storing, selling, and transport of foodstuffs would be of the utmost value. In order to obtain the control required it might be advisable to register all premises in which foodstuffs are prepared or sold. Even although this were not considered necessary, it is desirable that power should be provided to prevent any person, other than a person keeping open shop, from selling such articles as fruit, fish, and confectionery from any cart or other vehicle or from any basket, barrow, booth, or stance, unless he holds a certificate from the Local Authority. Corresponding powers are available as regards meat and meat food products, and have proved very useful. From time to time, justifiable complaints have been received regarding the premises used by street hawkers for the storing of fruit and fish and for the making of toffee and other confectionery.

PLACES OF PUBLIC REFRESHMENT.

The following Table shows the various classes of shops on the register at the end of 1925 :—

Description of Shop.	Number.
Ice-cream	68
Fried Fish	20
Restaurants	88
Bakers	9
Temperance Hotels	4
Dairies	2
Total	<hr/> 191 <hr/>

This is a decrease of 16, as compared with the previous year.

All these premises were visited from time to time in order to see that the Bye-laws for regulating the internal construction, lighting, and arrangement of

premises, with a view to the orderly conduct and control thereof, are being complied with.

Prosecutions for contraventions of the Bye-laws for regulating the hours of opening and closing are instituted by the Police.

UNSOOUND FOOD.

The total quantity of food seized or destroyed during the year was less than in 1924, as, while in that year the total weight was 177 tons, the quantity for 1925 was 155 tons. The decrease is due to the smaller quantity of fish dealt with.

All the meat seized in the slaughter-houses is examined by one of the Meat Inspectors—the Medical Officer of Health and the Veterinary Inspector—appointed under the Public Health (Meat Inspection) Regulations (Scotland).

The total number of visits made by the Sanitary Inspector's staff to the various places where foodstuffs are sold was 10,645. Of these, 3,905 were made to slaughter-houses, 1,904 to meat marts, 912 to fishcuring premises, 315 to the fish market, 273 to New Market Hall, 226 to shipping sheds, 216 to provision curing works, 205 to wholesale warehouses, 147 to street markets, and 2,542 to other premises, including all the offal and tallow marts.

The quantity of fish landed during the year was 2,553,765 cwts. Of this quantity, 1,506,853 cwts. were landed by British fishing vessels and 1,046,912 cwts. by foreign vessels. The quantity of fish landed in the previous year was 2,499,575 cwts. The quantity destroyed as unfit for human food was 42,339, as compared with 59,554 in the previous year. There were altogether 1,552 seizures, as compared with 1,616. The majority of these seizures was made in the slaughter-houses, while 249 were made in the meat marts, 119 in warehouses and shops, 197 in offal markets, 17 in the fish market, 8 in cold stores, 3 in New Market Hall, and 9 in other premises.

Tinned Foods.

Considerable attention continues to be paid to the inspection of tinned foods. All factories where such articles are prepared are regularly visited.

Wholesale warehouses and shops are also visited, and in these, 115 lots of tinned foods, comprising beef, mutton, tongue, fruit, milk, herrings, soups, and tomato puree were dealt with as being unfit for human food.

The Public Health (Unsound Food) Regulations (Scotland), 1925.

A number of samples were taken from consignments of tinned herring and other fish which had been returned from abroad. As these samples contained an excessive amount of tin, the owners were communicated with and the consignments destroyed.

The Public Health (Oversea Meat) Regulations (Scotland), 1925.

The only meat, within the meaning of the Oversea Meat Regulations, arriving in the Port during the year was a barrel of edible tallow and a barrel of sheep gut.

The sheep gut was released on an undertaking being given that it be not used for human food.

Prosecutions.

In no case was it found necessary to institute legal proceedings against anyone for having in his possession, or having sold or exposed for sale, food which was unfit for human consumption.

A detailed statement of the meat seized during each month of the year, as also a comparative statement of past years, will be found in Appendix III.

Meat Stores.

In accordance with the provisions of Section 12 of the Public Health (Meat Inspection) Regulations (Scotland), 1924, renewals of licences were granted in respect of Meat Stores, and no additional stores were registered in the course of the year. These premises were regularly visited in order to see that they were being kept in a proper sanitary condition.

THE SALE OF FOOD AND DRUGS ACTS.

Undernoted are particulars as to the samples procured in accordance with the Acts:—

	NO. OF SAMPLES PROCURED.			NUMBER NOT GENUINE.			Number of Prosecutions.	Number Successful.	Amount of Fines Imposed.
	Formal	In-formal.	TOTAL.	Formal	In-formal.	TOTAL.			
Sweet Milk,	524	1104	1628	28	211	239	21	21	£62 10 0
Skimmed Milk,	45	0	45	0	0	0	0	0	..
Cream,	18	0	18	0	0	0	0	0	..
Butter,	30	2	32	1	0	1	1	1	3 0 0
Margarine,	17	5	22	1	3	4	1	1	1 10 0
Jams,	0	6	6	0	0	0	0	0	..
Jellies,	0	5	5	0	0	0	0	0	..
Golden Syrup,	0	3	3	0	0	0	0	0	..
Honey,	0	2	2	0	0	0	0	0	..
Tinned Foods,	0	39	39	0	9	9	0	0	..
Beef Sausages,	6	1	7	0	0	0	0	0	..
Pork Sausages,	6	0	6	3	0	3	0	0	..
Beef Tallow,	0	2	2	0	0	0	0	0	..
Sponge Cakes,	0	6	6	0	2	2	0	0	..
Sponge Biscuits,	0	4	4	0	0	0	0	0	..
Sponge Fingers,	0	5	5	0	0	0	0	0	..
Ice-cream,	30	0	30	0	0	0	0	0	..
Aerated Waters,	0	4	4	0	0	0	0	0	..
Fruit Wines,	0	9	9	0	0	0	0	0	..
Coffee Essence,	0	9	9	0	0	0	0	0	..
Tea,	0	1	1	0	0	0	0	0	..
Meat Preservative,	0	1	1	0	0	0	0	0	..
Chocolate Creams,	0	1	1	0	0	0	0	0	..
Frozen Eggs,	0	1	1	0	0	0	0	0	..
Cream Powder,	0	1	1	0	0	0	0	0	..
Apples,	0	26	26	0	9	9	0	0	..
Grapes,	0	2	2	0	0	0	0	0	..
Whisky,	6	1	7	1	0	1	1	1	3 0 0
Rum,	5	0	5	0	0	0	0	0	..
Brandy,	2	0	2	0	0	0	0	0	..
Gin,	1	0	1	0	0	0	0	0	..
Invalid Foods,	0	2	2	0	0	0	0	0	..
Drugs,	0	30	30	0	1	1	0	0	..
TOTALS,	690	1272	1962	34	235	269	24	24	£70 0 0

In addition to the above, 42 unofficial samples of sweet milk were procured at byres or in course of transit.

The total number of samples analysed was, therefore, 2,004. This is by far the largest number analysed in any year. The corresponding number of samples in the previous year was 1,328.

It will be observed that the total number of official samples of sweet milk procured was 524, of which 28, or 5·3 per cent., were found to be under the standard. In the previous year, the number of samples procured was 536, of which 27, or 5·0 per cent., were deficient.

The following tables give particulars as to the number of official samples of sweet milk procured since 1914, the year in which was commenced the system of "following up" all deficient samples of milk—i.e., in the case of a retailer selling deficient milk, of taking a sample in the course of delivery from the consigner to the consignee; and, in the case of a producer, of visiting the byre at the earliest possible date and procuring a sample of the corresponding milk from the cows.

TABLE I.,

Giving number of Official Samples procured and showing the number deficient in Fat, Solids other than Fat, and in both Fat and Other Solids.

YEAR.	Number of Samples.	Number deficient in Fat.	Number deficient in Solids other than Fat.	Number deficient in both Fat and other Solids.	Total Number deficient.	Percentage deficient.	Number of Prosecutions.
1914, . . .	123	21	2	1	24	19·5	21
1915, . . .	207	21	6	5	32	15·6	25
1916, . . .	266	35	4	6	45	17·8	36
1917, . . .	252	36	12	3	51	20·2	37
1918, . . .	240	15	3	1	19	7·9	9
1919, . . .	262	25	3	3	31	11·8	22
1920, . . .	272	10	1	2	13	4·8	6
1921, . . .	431	18	7	2	27	6·3	15
1922, . . .	445	22	3	0	25	5·6	14
1923, . . .	463	15	3	4	22	4·8	9
1924, . . .	536	19	6	2	27	5·0	20
1925, . . .	524	24	2	2	28	5·3	21
TOTALS, .	4,021	261	52	31	344	8·6	235

The percentage (5·3) of deficient samples is slightly higher than the percentage (5·0) in the previous year, and also higher than the corresponding percentage (4·8) in each of the years 1920 and 1923. With these three exceptions, however, the percentage is the lowest recorded during the past twelve years. During the quinquennial period 1914-18, the average percentage of deficient samples was 16·2.

It is gratifying to report that, so far as could be ascertained, the deficiency of fat in a considerable number of the samples was due to failure to mix the milk properly, and not due to wilful tampering.

TABLE II.,

Giving number of Official Samples procured from Producers, as compared with the number procured from Retailers or Wholesalers. In each case, the Samples found deficient at the byre, or in course of delivery to the Retailer or Wholesaler, are excluded.

YEAR.	Number of Samples procured from Producers.	Number deficient.	Percentage deficient.	Number of Samples procured from Retailers or Wholesalers.	Number deficient.	Percentage deficient.
1914, . .	60	13	21·7	63	8	12·7
1915, . .	115	15	13·0	92	12	13·0
1916, . .	122	22	18·0	144	15	10·4
1917, . .	143	32	22·4	109	9	8·3
1918, . .	104	5	4·8	136	9	6·6
1919, . .	143	13	9·1	119	9	7·6
1920, . .	132	4	3·0	140	5	3·6
1921, . .	240	11	4·6	191	9	4·7
1922, . .	222	8	3·6	223	8	3·6
1923, . .	246	9	3·7	217	6	2·8
1924, . .	260	10	3·8	276	11	4·0
1925, . .	238	12	5·0	286	12	4·2
TOTALS, .	2,025	154	7·6	1,996	113	5·7

The percentage of producers' samples found deficient was 5·0, as compared with a percentage of 4·2 for the samples procured from retailers or wholesalers. In the preceding year, the corresponding percentages were, respectively, 3·8 and 4·0. During the quinquennial period 1914-18, the average percentage of producers' samples found deficient was 16·0, as compared with a corresponding percentage of 10·2 for the samples procured from retailers or wholesalers.

Fourteen byres were visited during the year, and in three cases a mixed sample of the "morning" milk of the whole herd was found under the standard. In two cases the deficiency was in fat, and in the remaining case in solids other than fat. Prosecutions were not instituted in any of these three cases.

Of the samples procured in course of delivery to the retailer or wholesaler, two were found to be deficient.

TABLE III.,

Giving information as to the sources from which the Samples were procured.

YEAR	RETAIL SAMPLES FROM SHOPS.			RETAIL SAMPLES FROM CARTS.			WHOLESALE SAMPLES IN COURSE OF DELIVERY.			SAMPLES TAKEN ON DELIVERY AT INSTITUTIONS.		
	Samples taken.	Found deficient.	Per-centage	Samples taken.	Found deficient.	Per-centage	Samples taken.	Found deficient.	Per-centage	Samples taken.	Found deficient.	Per-centage
1914, . . .	50	8	16.0	35	7	20.0	24	8	33.3	14	1	7.1
1915, . . .	82	14	17.1	64	4	6.2	38	11	29.0	23	3	13.0
1916, . . .	118	19	16.1	82	9	11.0	47	16	34.0	19	1	5.3
1917, . . .	83	11	13.3	54	6	11.1	92	34	37.0	23	0	0.0
1918, . . .	123	8	6.5	66	7	10.6	49	4	8.2	2	0	0.0
1919, . . .	101	14	13.7	36	2	5.5	123	15	12.2	2	0	0.0
1920, . . .	129	6	4.7	32	2	6.3	111	5	4.5	0	0	0.0
1921, . . .	166	10	6.0	87	3	3.4	176	14	8.0	2	0	0.0
1922, . . .	188	10	5.3	86	5	5.8	169	10	5.9	2	0	0.0
1923, . . .	198	6	3.0	86	3	3.5	176	13	7.4	3	0	0.0
1924, . . .	209	10	4.8	129	8	6.2	193	9	4.7	5	0	0.0
1925, . . .	252	16	6.3	105	4	3.8	158	8	5.1	9	0	0.0
TOTALS, . .	1,699	132	7.8	862	60	7.0	1,356	147	10.8	104	5	4.8

During the past year the largest percentage (6.3) of deficient samples was found amongst those purchased in retail shops. This percentage is not only higher than the corresponding percentage in the previous year, but is also higher than in any year since 1919. During the quinquennial period 1914-18, the average corresponding percentage was 13.8.

The percentage of deficient samples purchased from retail carts was 3.8, as compared with 6.2 in the previous year. During the quinquennial period 1914-18, the average corresponding percentage was 11.8.

The percentage of deficient samples procured in the course of delivery was 5.1, as compared with 4.7 in the preceding year. During the quinquennial period 1914-18, the average corresponding percentage was 28.3.

From the foregoing tables it will be seen that the chemical quality of the milk as supplied in the City has greatly improved within recent years.

Undernoted are particulars regarding all the deficient samples of sweet milk procured during the past year:—

A. Retailers' or Wholesalers' Samples.

No.	Complained of Sample.		Sample taken on delivery.		Remarks.
	Fat.	Other Solids.	Fat.	Other Solids.	
1	2·68	9·39	3·79	9·05	Letter of warning sent.
2	2·85	8·93	3·30	8·97	Penalty £2.
3	2·94	9·06	3·44	9·21	Penalty £1.
4	2·92	8·96	3·46	8·86	Penalty £2.
5	2·90	8·72	3·65	8·72	Penalty £2.
6	2·75	9·00	3·55	9·15	Penalty £3.
7	2·85	8·77	3·30	8·79	Penalty £3.
8	2·53	9·12	3·79	9·03	Penalty £2.
9	2·76	8·97	3·61	8·92	Penalty £3.
10	2·75	8·40	3·64	8·17	Penalty £2.
11	2·48	8·62	3·10	8·81	Penalty £2.
12	2·79	8·88	3·46	8·76	Penalty £2.
13	2·59	8·55	3·00	8·80	Letter of warning sent.
14	2·73	8·90	2·68	9·07	No proceedings taken.

It will be observed that in two cases the consignments in course of delivery to the retailers were found to be under the standard. In one of these cases (No. 10) the consignment as delivered contained 3·64 per cent. fat and 8·17 per cent. other solids, whereas the sample purchased from the retailer on the previous day contained 2·75 per cent. fat and 8·40 per cent. other solids. On the byre being visited (Case No. 22), it was found that a mixed sample of the "morning" milk of the whole herd (7 cows) contained 4·24 per cent. fat and 8·15 per cent. other solids. No proceedings were taken against the producer, but, as the result of careful inquiry, we were satisfied that the retailer had failed to mix the milk properly, and proceedings were instituted against her.

Undernoted are the reasons for no legal proceedings being instituted in the cases of Nos. 1 and 13, despite the fact that the samples procured on delivery were found to be genuine.

As regards case No. 1, the retailer from whom the milk was purchased had only recently commenced business. After the official sample had been procured in course of delivery, she stated that she had reason to believe that the quality of the milk supplied to her was varying greatly from day to day. Accordingly, thirteen unofficial samples were taken from consignments supplied to her, when it was found that the percentages of fat contained in these consignments ranged from 2·95 to 5·11. After consultation with the Procurator-Fiscal, it was decided to warn the retailer.

Two official samples purchased shortly afterwards were found to contain, respectively, 3.48 per cent. fat and 8.62 per cent. solids not fat, and 3.20 per cent. fat and 8.66 per cent. solids not fat.

As regards Case No. 13, the retailer concerned received daily from a farmer two consignments—one consisting of 14 gallons "hot" milk, and the other, 11 gallons "cold" milk. The complained of sample was said to consist of "cold" milk, and a mixed sample of this consignment contained 3.00 per cent. fat and 8.80 per cent. solids not fat. The consignment was, however, delivered in two cans, one containing 6 gallons and the other 5 gallons. As the retailer stated that he used the contents of these cans separately, unofficial samples were procured from each can, when it was found that one of these samples was under the standard. A warning was, accordingly, also given in this case.

As stated in previous reports, a very common cause of a deficiency in fat is the failure of the retailer to mix the milk before it is poured from the can in which it is delivered into the retail receptacle, which is almost invariably much smaller than the wholesale can. Despite the repeated warnings given to milk sellers regarding the necessity of plunging the milk before pouring it into the retail vessels, and of keeping the milk mixed while in course of sale, it is surprising to find that a number of milk sellers do not appreciate the value of this advice until they find themselves in trouble for selling deficient milk.

B. Producers' Samples.

No.	Complained of Sample.		Sample taken at byre.		Remarks.
	Fat.	Other Solids.	Fat.	Other Solids.	
15	3.16	8.40	<div style="display: flex; align-items: center; justify-content: center;"> <div style="font-size: 3em; margin-right: 10px;">{</div> <div style="text-align: center;"> <div>Morning</div> <div>3.69 8.85</div> <div>Evening</div> <div>3.99 8.98</div> </div> <div style="font-size: 3em; margin-left: 10px;">}</div> </div>		Penalty £5.
16	2.97	7.78	3.75	9.01	Penalty £8 (second offence).
17	2.93	8.97	3.49	8.79	Letter of warning sent.
18	2.90	9.19	3.65	8.87	Penalty £2.
19	2.75	8.94	3.72	8.71	Penalty £3.
20	2.89	8.88	3.22	8.78	Penalty £3.
21	2.61	9.06	3.20	9.06	Penalty £6 (second offence).
22	3.64	8.17	4.24	8.15	No proceedings taken.
23	2.78	8.58	4.10	8.69	Penalty £3.
24	2.90	8.69	3.21	8.75	Penalty £4.
25	2.50	8.90	2.81	8.83	No proceedings taken.
26	2.68	9.07	2.80	9.05	No proceedings taken.
27	2.82	8.84	3.55	8.94	Penalty £2 10s.
28	2.92	8.98	3.19	8.88	Penalty £2.

It will be observed that in connection with No. 22 a mixed sample of the "morning" milk of the whole herd (7 cows) was deficient in other solids. It will further be observed that, in connection with Nos. 25 and 26, mixed samples of the "morning" milk of the whole herds, numbering, respectively, 5 and 21 cows, were deficient in fat. Particulars regarding these herds will be found on pp. 38-52.

It will be observed, in connection with Case No. 17, that no legal proceedings were instituted, notwithstanding the fact that the sample procured at the byre was considerably above the standard. The circumstances were as follows:—The complained of sample was procured from a consignment of $7\frac{1}{2}$ gallons "morning" milk. When the byre was visited, a mixed sample was procured from the "morning" milk of the whole herd (9 cows), the quantity yielded being 10 gallons. The farmer stated, however, that the complained of consignment consisted of the "morning" milk of only 7 cows, as the remaining two cows had recently calved and their milk was not included in the complained of consignment. As the samples procured in the City and at the byre were not, therefore, strictly comparable, it was decided, after consultation with the Procurator-Fiscal, to warn the farmer. An official sample from a corresponding consignment of 9 gallons was procured a few weeks later, and this sample was certified to contain 3·68 per cent. fat and 8·76 per cent. solids other than fat.

The results of further investigation into the production and distribution of some of the milk supplies providing such deficiencies are of sufficient interest to be recorded.

The particulars are as follows:—

Case No. 16.—On 18th February, samples from two consignments were procured at the Railway Station in course of delivery by a producer who had, on 30th December, 1924, been fined £6 for supplying a consignment of 16 gallons milk containing 3·18 per cent. fat and 7·83 per cent. other solids.

One of the samples was from a consignment of 10 gallons "morning" milk, and contained 3·43 per cent. fat and 8·74 per cent. other solids; while the second sample was from a consignment of 5 gallons "evening" milk, and contained 2·97 per cent. fat and 7·78 per cent. other solids.

The byre was visited on the following evening and a sample procured from the mixed milk of the whole herd (6 cows). The quantity yielded was about $4\frac{3}{4}$ gallons, and the sample was certified to contain 3·75 per cent. fat and 9·01 per cent. other solids.

The farmer alleged, as he did on the occasion of the previous charge against him, that the milk must have been tampered with in course of transit by means of public carriers between the farm and the City. Arrangements were accordingly made with the consignee to send me on nine consecutive mornings samples from each of the two consignments. None of these samples was found to be under the standard. The County Police on six different occasions examined the cans at the places at which they were deposited prior to being conveyed to the City, and reported that on no occasion did they obtain any evidence that the cans had been tampered with.

Accused pled guilty, and was fined £8.

The lids of the cans referred to, although secured by means of pieces of tow, were not fastened in such a way as would have prevented anyone tampering with the milk without signs of such tampering being apparent. It is important, therefore, to note that, since 1st January last, the Milk and Dairies (Scotland) Order, 1925, enacts that—"Every person shall, before delivery to any common carrier or other person of a vessel containing milk for transit, cause the vessel to be sealed by means of a leaden seal or locked." The Railway Companies require that the tare weight of locked churns shall be conspicuously stamped thereon. This requirement is not only of great importance in connection with possible contraventions of the Sale of Food and Drugs Acts, but is of even greater importance in relation to the possible contamination of milk in transit.

Cases Nos. 19 and 25.—On 30th June, a sample of milk (Case No. 19) was purchased in the milk-house connected with a small City byre. The sample contained 2.75 per cent. fat and 8.94 per cent. other solids. The byre was visited on the following morning, when two samples were procured. One sample, which contained 3.97 per cent. fat and 8.88 per cent. other solids, was a mixed sample of the "morning" milk (amounting to about 2 gallons) of the cow which was said to have yielded the quantity of milk from which the complained of sample was taken. The second sample, which contained 3.72 per cent. fat and 8.71 per cent. other solids, was a mixed sample of the "morning" milk of the whole herd, consisting of 5 cows. The quantity of milk yielded was about 9 gallons. The cows were milked three times daily, viz., 5.30 a.m., 12.30 p.m., and 6.45 p.m. The farmer pled guilty, and was fined £3.

On 29th September, the milk-house was re-visited (Case No. 25), and the sample purchased was certified to contain 2.50 per cent. fat and 8.90 per cent. other solids. The byre was visited on the following morning, and again two samples were procured. One sample, which contained 2.17 per cent. fat and 9.05 per cent. other solids, was a mixed sample of the "morning" milk (amounting to about 1½ gallons) of the cow which was said to have yielded the quantity of milk from which the complained of sample was taken. The second sample, which contained 2.81 per cent. fat and 8.83 per cent. other solids, was a mixed sample of the "morning" milk of the whole herd, which still consisted of 5 cows. The quantity yielded was about 7 gallons. Approximate results of the analyses of these two samples were received by 11 a.m. on the same day. The byre was accordingly re-visited at the "mid-day" and "evening" milkings of that day, and also at the "morning" milking on the following day, when on each occasion samples were taken of the milk of each

individual cow. A sample was also taken of the mixed milk of the 5 cows. Under-noted are particulars:—

No. of Cow.	Morning Milk, 5.30 a.m.—1st Oct.			Mid-day Milk, 12.30 p.m.—30th Sept.			Evening Milk, 6.30 p.m.—30th Sept.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About 1 gall. 6 pts.	2.61	8.74	About 1 gall.	4.20	8.85	About 1 gall.	4.60	9.01
2	1 gall.	2.57	8.55	5 pts.	3.70	8.68	4 pts.	3.70	8.82
3	2 „	2.75	8.77	1 gall. 2 pts.	3.90	8.71	1 gall.	3.50	8.80
4	1 „	3.35	8.65	5 pts.	4.00	8.75	4 pts.	3.57	8.71
5	1 „	2.00	8.50	4 „	3.20	8.60	4 „	3.30	8.70
Whole Herd	6 $\frac{3}{4}$ „	2.68	8.70	4 galls.	3.85	8.73	3 $\frac{1}{2}$ galls.	3.80	8.85

Further samples of the milk of the individual cows were taken by the farmer at mid-day and in the evening of 14th October, and in the morning of 15th October.

No. of Cow.	Morning Milk - 15th October.			Mid-day Milk - 14th October.			Evening Milk—14th October.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About 2 galls.	2.85	9.32	About 1 gall.	4.18	9.63	About 1 gall.	5.05	9.57
2	1 „	2.85	8.72	$\frac{1}{2}$ „	3.95	8.93	$\frac{1}{2}$ „	4.11	8.94
3	2 „	2.80	9.01	1 „	3.31	9.06	1 „	3.58	8.97
4	1 $\frac{1}{2}$ „	2.80	9.45	1 „	3.64	9.48	1 „	4.62	9.48
5	1 „	2.80	9.27	$\frac{1}{2}$ „	4.10	9.41	$\frac{1}{2}$ „	4.89	9.26

It will be seen that in the first series of samples the “morning” milk of all the cows, with one exception (Cow No. 4), was under the standard for fat. By the time the second series of samples was taken, this cow had been disposed of, and the “morning” milk of the new cow was found to be under the standard also.

Arrangements were then made that the byre should be re-visited by my assistant on eight successive mornings, commencing on 19th October. Undernoted are particulars of the samples taken:—

Cow No.	5:30 a.m.—19th October.			5:30 a.m.—20th October.			5:30 a.m.—21st October.			5:30 a.m.—22nd October.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About 1½ galls.	2.95	9.37	About 1½ galls.	3.10	9.30	About 1½ galls.	3.09	9.32	About 1½ galls.	3.46	9.17
2	1 "	3.51	8.86	1½ "	3.60	8.83	1½ "	3.69	8.76	1½ "	3.50	8.65
3	1½ "	2.70	9.15	1½ "	2.68	9.14	1½ "	2.81	9.00	1½ "	3.30	8.97
4	2 "	4.15	9.50	2½ "	3.90	9.52	1½ "	3.69	9.30	2½ "	3.52	9.38
5	1½ "	3.30	9.26	1½ "	2.75	8.76	1½ "	2.50	8.78	1½ "	2.85	8.77
	Average	3.33	9.27		3.24	9.17		3.17	9.10		3.36	9.04

Cow No.	5:30 a.m.—23rd October.			5:30 a.m.—24th October.			6:30 a.m.—25th October.			5:30 a.m.—26th October.		
	Quantity Yielded	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About 1½ galls.	3.50	9.20	About 1½ galls.	3.25	9.10	About 1½ galls.	3.00	9.25	About 1½ galls.	3.35	9.20
2	1½ "	3.45	8.76	1½ "	3.25	8.75	1½ "	3.05	8.81	1 "	3.31	8.79
3	1½ "	3.11	8.97	1½ "	2.80	8.96	2½ "	3.25	9.10	1½ "	2.61	8.86
4	1½ "	3.55	9.31	1½ "	3.60	9.31	2½ "	4.35	9.46	1½ "	3.98	9.14
5	1½ "	3.10	8.94	1½ "	2.90	8.97	1½ "	2.71	8.77	1½ "	2.71	8.64
	Average	3.34	9.06		3.18	9.05		3.40	9.14		3.21	

It will be observed that, on each of the eight mornings, the average percentage of fat in the milk of the 5 cows was appreciably above the standard; whereas on 1st and 14th October the corresponding percentages of fat were, respectively, 2·68 and 2·80. By the time this series of samples was taken, Cow No. 4 had again been replaced by another cow, but otherwise there was no change in the composition of the herd.

Case No. 22.—On 6th August, a sample of milk purchased in a retail shop was certified to contain 2·75 per cent fat and 8·40 per cent. solids not fat. On the following day a mixed sample (*Case No. 22*) from a consignment of 6 gallons “morning” milk was certified to contain 3·64 per cent. fat and 8·17 per cent. solids not fat.

The byre was visited on 8th August, when two samples were procured. The herd consisted of 7 cows. One sample, which contained 7·40 per cent. fat and 9·10 per cent. other solids, was a mixed sample of the “morning” milk (amounting to about 1 gallon) of one cow. About one-half of this cow’s milk was retained daily for domestic use. The second sample, which contained 4·24 per cent. fat and 8·15 per cent. other solids, was a mixed sample of the “morning” milk of the 6 remaining cows (amounting to 5½ gallons), *plus* half a gallon of the milk of the individual cow referred to. This quantity of milk corresponded with the complained of sample procured from the consignment in course of delivery. The cows were milked twice daily, viz., 6 a.m. and 5·15 p.m.

Samples of the “morning” and “evening” milk of each of the 7 cows were procured on 17th August.

Undernoted are particulars:—

Cow No.	MORNING MILK.			EVENING MILK.		
	Quantity Yielded.	Fat.	Solids.	Quantity Yielded.	Fat.	Solids.
1	About $\frac{7}{8}$ gallons .	3·50	8·57	About $\frac{3}{4}$ gallons .	3·60	8·65
2	„ 1½ „ .	3·71	8·62	„ 1 „ .	4·60	8·65
3	„ 1½ „ .	3·00	8·08	„ 1½ „ .	3·10	7·98
4	„ $\frac{3}{4}$ „ .	2·05	7·25	„ $\frac{3}{4}$ „ .	2·21	7·14
5	„ 1½ „ .	2·35	8·43	„ 1½ „ .	2·21	8·32
6	„ 1½ „ .	4·05	8·87	„ 1 „ .	4·70	8·70
7	„ $\frac{3}{4}$ „ .	3·91	8·04	„ ½ „ .	3·30	8·09
Whole Herd	„ 7½ „ .	3·19	8·33	„ 6½ „ .	3·30	8·20

It will be observed that mixed samples of both the “morning” and “evening” milk of the entire herd were under the standard for solids not fat, although above the standard for fat.

It will further be observed that—

- (1) The “morning” and “evening” milks of two of the cows (Nos. 4 and 5) were under the standard both for fat and solids not fat; and
- (2) The “morning” and “evening” milks of two other cows (Nos. 3 and 7) were under the standard for solids not fat.

The herd was examined by Mr. James M'Allan, City Veterinary Inspector, who reported that the majority of the cows were very aged and were not, in his opinion, capable of producing milk of normal quality. The farmer thereupon undertook to feed off the unsatisfactory cows.

Case No. 26.—A sample of milk purchased in a retail shop on 30th September contained 2·73 per cent. fat and 9·07 per cent. solids not fat. A mixed sample from a consignment of 4 gallons “morning” milk procured in course of delivery on the following morning contained 2·68 per cent. fat and 9·07 per cent. solids not fat. A sample was at the same time procured from a consignment of 7 gallons “evening” milk, and this sample contained 3·81 per cent. fat and 8·99 per cent. solids not fat.

When the byre was visited on the morning of 2nd October, the farmer expressed a desire to have samples taken of the milk of each individual cow. It was not possible to do this at that time, but two samples were taken. One sample, which contained 3·62 per cent. fat and 8·85 per cent. solids not fat, was a mixed sample of the “morning” milk of the four cows stated to have yielded the complained of consignment; while the second sample, which contained 3·32 per cent. fat and 9·03 per cent. solids not fat, was a mixed sample of the “morning” milk of the whole herd, consisting of 21 cows. The amount yielded was about 26 gallons. The cows were milked three times a day, viz., 4·45 a.m., 12 noon, and 6 p.m.

In accordance with our usual practice, all the cows were tested immediately after each milker had finished. The milking was well done, only $1\frac{1}{4}$ pints being taken by my assistants from the 21 cows.

On the farmer being informed that there was reason to believe that the consignments of “morning” milk supplied by him were consistently low in fat, whereas the consignments of “mid-day” and “evening” milk were consistently above the standard for fat, he asked if I would be willing to re-visit the byre and take samples of the milk of the individual cows at each of the three milkings. The byre was accordingly re-visited by two of my assistants at mid-day and on the evening of the same day, and I accompanied my assistants when the byre was re-visited on the following morning.

Table IV. gives particulars regarding the individual samples taken at each of the three milkings:—

TABLE IV.

No. of Cow.	Morning Milk, 4.45 a.m.—3rd Oct.			Mid-day Milk, 12 noon—2nd Oct.			Evening Milk, 6 p.m.—2nd Oct.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
	About			About			About		
1	4 pts.	3.60	8.98	4 pts.	3.90	8.93	3 pts.	3.69	8.74
2	7 "	2.70	8.70	6 "	4.71	8.50	5 "	4.25	8.57
3	9 "	3.60	8.35	4 "	3.61	8.68	6 "	3.70	8.72
4	13 "	2.55	9.20	9 "	3.91	8.69	7 "	3.95	8.95
5	13 "	2.67	9.15	9 "	3.80	9.15	7 "	3.21	9.30
6	4 "	2.21	9.19	4 "	3.85	9.06	5 "	5.55	9.15
7	12 "	2.21	8.77	9 "	3.29	8.52	9 "	3.55	8.63
8	14 "	2.41	9.11	12 "	4.05	8.66	10 "	3.76	8.91
9	9 "	2.85	9.35	4 "	3.60	9.10	4 "	3.75	9.23
10	10 "	3.20	8.86	8 "	3.45	8.70	7 "	4.10	8.78
11	18 "	2.30	9.30	13 "	3.75	8.84	10 "	4.60	9.07
12	13 "	2.65	9.17	10 "	3.90	8.87	8 "	4.00	8.95
13	11 "	3.57	9.17	7 "	4.20	9.13	6 "	4.50	9.23
14	7 "	3.22	9.00	4 "	3.21	8.74	4 "	3.15	8.77
15	8 "	2.88	9.18	4 "	4.20	9.07	6 "	4.50	9.26
16	12 "	2.40	8.58	6 "	2.80	8.10	5 "	1.80	8.40
17	7 "	2.75	8.58	4 "	3.20	8.65	5 "	3.50	8.73
18	6 "	3.70	10.01	4 "	4.60	9.72	2 "	4.20	9.75
19	11 "	2.61	8.86	6 "	5.05	8.63	7 "	4.10	8.92
20	2 "	2.50	8.82	1 "	4.05	9.27	1 "	3.50	9.08
21	10 "	3.32	8.75	6 "	3.80	8.71	6 "	3.45	8.80
Whole Herd	200 "	2.80	9.05	134 "	3.80	8.83	123 "	3.95	8.93

It will be observed that—

- (1) The amount of fat in a mixed sample of the "morning" milk of the whole herd was 2.80 per cent., as compared with a corresponding percentage of 3.32 on the previous morning.
- (2) The "morning" milk of no fewer than 14 out of the 21 cows was under the standard for fat, and that, although the milk of all these 14 cows was above the standard for other solids, the milk of one cow (No. 3) was under the standard for other solids.
- (3) Although a mixed sample of the "morning" milk of the 21 cows contained only 2.80 per cent. fat, the quantities of fat in the corresponding samples of "mid-day" and "evening" milk were, respectively, 3.80 and 3.95.
- (4) In only one case (Cow No. 16) was the "mid-day" or "evening" milk under the standard. At mid-day the milk contained 2.80 per cent. fat and 8.10 per cent. other solids, and in the evening, 1.80 per cent. fat and 8.40 per cent. other solids. The "morning" milk of this cow contained 2.40 per cent. fat and 8.58 per cent. other solids.

- (5) Although the shortest interval (6 hours) was between the "mid-day" and "evening" milkings, the amount of fat in the "evening" milk of no fewer than 10 cows was less than at "mid-day," when the interval between that milking and the "morning" milking was $7\frac{1}{4}$ hours.

The byre was re-visited at each of the three milkings on 9th October, and at the "morning" milking on 10th October.

Tables V. and VI. give particulars regarding the samples taken.

TABLE V.

No. of Cows.	Morning Milk, 4.45 a.m.—9th Oct.			Mid-day Milk, 12 noon 9th Oct.			Evening Milk, 6 p.m.—9th Oct.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About $\frac{1}{2}$ gall.	3.79	9.16	About $\frac{1}{2}$ gall.	3.41	9.39	About $\frac{3}{8}$ gall.	3.45	9.26
2	$1\frac{1}{8}$ "	3.30	9.05	$\frac{3}{8}$ "	3.50	9.00	$\frac{1}{2}$ "	3.45	9.00
3	$\frac{7}{8}$ "	3.20	8.69	$\frac{1}{2}$ "	3.65	8.94	$\frac{1}{2}$ "	3.72	8.78
4	$1\frac{5}{8}$ "	2.29	9.06	1 "	3.70	8.87	$1\frac{1}{4}$ "	5.55	9.60
5	$1\frac{5}{8}$ "	3.02	9.00	$1\frac{1}{8}$ "	4.00	9.35	1 "	3.55	9.25
6	$1\frac{1}{2}$ "	2.00	9.40	$\frac{7}{8}$ "	5.00	9.40	$\frac{1}{2}$ "	4.72	9.53
7	$1\frac{5}{8}$ "	3.10	8.92	$1\frac{1}{8}$ "	3.55	8.90	$1\frac{1}{8}$ "	5.30	8.75
8	2 "	3.30	8.75	2 "	5.30	8.70	$1\frac{1}{8}$ "	5.30	8.70
9	1 "	3.05	9.27	$\frac{5}{8}$ "	3.55	9.33	$\frac{7}{8}$ "	3.15	8.95
10	$1\frac{3}{8}$ "	3.95	9.08	$\frac{7}{8}$ "	2.85	8.85	$\frac{7}{8}$ "	4.70	8.82
11	$2\frac{1}{8}$ "	2.82	9.23	$1\frac{5}{8}$ "	3.05	8.88	$1\frac{3}{8}$ "	3.80	9.15
12	$1\frac{5}{8}$ "	3.15	8.80	$1\frac{3}{4}$ "	3.25	8.90	$\frac{7}{8}$ "	3.35	8.76
13	$1\frac{1}{4}$ "	3.79	9.23	$\frac{3}{4}$ "	4.80	9.50	$\frac{3}{8}$ "	3.70	9.31
14	1 "	3.10	9.00	$\frac{3}{4}$ "	3.15	9.10	$\frac{5}{8}$ "	3.50	8.85
15	$1\frac{1}{8}$ "	3.40	9.18	$\frac{7}{8}$ "	4.60	9.50	$\frac{1}{2}$ "	3.30	9.21
16	$1\frac{1}{4}$ "	3.02	8.66	$\frac{7}{8}$ "	3.12	8.98	$\frac{3}{4}$ "	2.90	8.66
17	1 "	3.00	8.78	$\frac{5}{8}$ "	3.41	8.74	$\frac{3}{8}$ "	3.90	8.70
18	$\frac{3}{4}$ "	4.10	9.97	$\frac{5}{8}$ "	4.00	9.95	$\frac{3}{8}$ "	4.20	10.00
19	$1\frac{1}{2}$ "	3.90	8.75	$\frac{7}{8}$ "	3.95	9.00	$\frac{3}{4}$ "	3.55	8.86
20	$1\frac{1}{8}$ "	4.82	8.50	(Not milked at mid-day)			$\frac{5}{8}$ pint	3.80	8.55
21	$1\frac{1}{8}$ "	3.02	8.83	$\frac{7}{8}$ gall.	3.90	9.07	$\frac{3}{4}$ gall.	3.65	8.96
Whole Herd	$24\frac{1}{4}$ "	3.28	8.98	$19\frac{1}{8}$ "	4.20	9.15	$13\frac{1}{2}$ "	4.10	8.95

It will be observed that—

- (1) A mixed sample of the "morning" milk of the whole herd contained 3.28 per cent. fat, as compared with 2.80 per cent. on 3rd October, and 3.32 per cent. on 2nd October.
- (2) The "morning" milk of only three cows was under the standard for fat. On 3rd October, no fewer than 14 of the cows yielded "morning" milk which was under the standard.

TABLE VI.

No. of Cow.	Morning Milk—10th October.		
	Quantity Yielded.	Fat.	Other Solids.
1	About $\frac{1}{2}$ gall.	3.65	9.37
2	1 „	2.80	8.95
3	$1\frac{1}{8}$ „	3.00	8.72
4	$1\frac{5}{8}$ „	2.65	9.00
5	$1\frac{5}{8}$ „	2.80	9.57
6	$\frac{7}{8}$ „	3.40	9.55
7	$1\frac{3}{4}$ „	2.55	8.90
8	$2\frac{1}{8}$ „	2.50	9.00
9	1 „	2.65	9.20
10	$1\frac{1}{8}$ „	3.00	9.00
11	$1\frac{7}{8}$ „	1.95	9.30
12	$1\frac{1}{2}$ „	1.80	8.55
13	$1\frac{1}{4}$ „	3.05	9.35
14	$\frac{7}{8}$ „	2.60	8.95
15	$1\frac{1}{4}$ „	2.35	9.10
16	$1\frac{1}{4}$ „	2.62	8.68
17	1 „	3.15	8.87
18	$\frac{7}{8}$ „	3.75	9.86
19	$1\frac{1}{2}$ „	2.35	8.90
20	$\frac{1}{8}$ „	2.90	8.52
21	$1\frac{1}{4}$ „	3.20	8.95
Whole Herd	$24\frac{3}{4}$ „	2.70	9.10

It will be observed that—

A mixed sample of the “morning” milk of the whole herd contained only 2.70 per cent. fat, as compared with 3.28 per cent. on the previous day. On this occasion the “morning” milk of 13 of the cows was under the standard.

Summarising these results, it will be seen that a mixed sample of the “morning” milk of 21 cows procured on 2nd October contained 3.32 per cent. fat; while corresponding samples procured on the mornings of 3rd, 9th, and 10th October contained, respectively, 2.80, 3.28, and 2.70 per cent. fat.

The farmer was asked to supply the undernoted information:—

No. of Cow.	Breed.	Purchase Price.	Date of Purchase.	Approximate Age	Date of last Calving.
1	Cross,	£36 0 0	November, 1924 .	5 years,	November, 1924
2	Cross Friesian,	75 0 0	March, 1921 .	10 „	February, 1925.
3	Cross,	20 0 0	June, 1925 . .	6 „	April, 1925.
4	„	48 0 0	January, 1922 .	10 „	May, 1925.
5	„	52 0 0	July, 1922 . .	7 „	August, 1925.
6	Friesian, . . .	Reared	.....	4 „	Aborted Sept., 1925.
7	Cross,	50 0 0	November, 1922 .	8 „	December, 1924.
8	„	37 0 0	September, 1925	5 „	September, 1925.
9	„	50 0 0	November, 1924 .	5 „	November, 1924.
10	„	76 0 0	May, 1921 . .	9 „	April, 1925.
11	„	38 0 0	September, 1925	5 „	September, 1925.
12	„	37 10 0	September, 1925	6 „	September, 1925.
13	„	42 0 0	December, 1924 .	6 „	December, 1924.
14	„	74 0 0	April, 1922 . .	8 „	April, 1925.
15	„	43 0 0	December, 1924 .	7 „	January, 1925.
16	„	48 0 0	February, 1924 .	7 „	April, 1925.
17	„	50 0 0	January, 1924 .	7 „	March, 1925.
18	„	46 0 0	March, 1924 . .	6 „	May, 1925.
19	„	49 0 0	January, 1924 .	5 „	July, 1925.
20	Cross Friesian,	33 10 0	January, 1925 . .	5 „	January, 1925.
21	Cross,	43 0 0	January, 1924 .	6 „	February, 1925.
22	Cross Ayrshire	65 0 0	March, 1921 . .	9 „	April, 1925.

Full particulars as to the nature of the feeding for three weeks prior to 1st October—the date when the complained of sample of milk was procured:—

Morning—draff and grass. Out on second crop from 8 a.m. to 11 a.m. Draff again. Out on second crop from 3 p.m. to 5.30 p.m. Draff again, along with cut grass.

Full particulars as to the nature of feeding at the time the samples were taken, giving exact date or dates of any change in feeding within the previous three weeks:—

On 26th September, the clover or second crop was finished. Started yellow turnips. Morning—draff and turnips. Out on pasture, sometimes old pasture and sometimes new pasture, from 8 a.m. to 11 a.m.; draff again and meadow hay. Out on old pasture from 3 p.m. to 5.30 p.m. Turnips and hay at night.

If the cows had been pastured on different fields during past three weeks, give full particulars as to any supposed difference in the quality of the pasture in the different fields:—

The cows have been pastured sometimes on old pasture and sometimes on new pasture or second crop, but the fields are now so bare that no difference is known in the quality of the pasture.

What is the practice as regards the cows? Are they purchased in calf or newly calved and then fattened off, or are they re-served from year to year? If the latter, for how many years on an average are the cows kept in milk?

The cows when purchased are either in calf or newly calved. The best of the cows are re-served from year to year; the others fattened off. The cows are kept in milk on an average from two to three years.

Our Veterinary Inspector examined the herd on 20th October and reported that "the cows are, in my opinion, a very good average commercial lot, healthy in appearance, and in good condition. They are all 'milky looking' animals."

The farmer was greatly concerned about the quality of the "morning" milk, and, on his own suggestion, he, on 14th October, commenced to milk the cows only twice daily, viz., at 4.45 a.m. and 5 p.m. The byre was re-visited on the mornings of 5th and 6th November, and samples procured of the milk of each of the individual cows, which at that time numbered 22. Arrangements were also made with the farmer that he should on each of these days procure corresponding samples of the "evening" milk. Neither any member of my staff nor myself was able to be present at the evening milkings.

Tables VII. and VIII. give particulars regarding the samples taken.

TABLE VII.

No. of Cow.	Morning Milk, 4.45 a.m.—5th Nov.			Mid-day Milk, 12 noon—5th Nov.			Evening Milk, 5 p.m.—5th Nov.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
	About			About			About		
1	$\frac{1}{2}$ gall.	4.42	9.03	...	...	...	$\frac{5}{8}$ gall.	3.85	9.32
2	"	3.82	8.33	...	...	...	$\frac{1}{4}$ "	2.55	8.55
3	1 "	3.42	8.70	...	...	...	1 "	3.40	8.77
4	$1\frac{1}{8}$ "	3.76	9.05	...	...	...	$1\frac{1}{4}$ "	2.85	9.18
5	$1\frac{5}{8}$ "	3.21	8.91	...	...	...	$1\frac{3}{4}$ "	3.12	9.05
6	"	3.30	8.93	...	...	...	"	4.11	9.27
7	$1\frac{1}{8}$ "	4.02	8.53	...	...	...	$\frac{1}{2}$ "	3.83	8.82
8	2 "	1.61	8.54	$1\frac{1}{4}$ galls.	3.30	8.55	1 "	3.48	8.74
9	1 "	3.05	8.97	...	...	...	1 "	3.05	9.36
10	$1\frac{1}{4}$ "	3.95	8.95	...	...	...	$1\frac{1}{4}$ "	3.88	9.12
11	$2\frac{3}{4}$ "	2.00	8.81	$1\frac{1}{2}$ galls.	3.05	8.88	$1\frac{1}{2}$ "	3.80	9.02
12	$1\frac{1}{4}$ "	3.00	8.86	...	...	...	2 "	2.90	8.97
13	$1\frac{1}{4}$ "	4.20	9.21	...	...	...	1 "	3.41	9.60
14	$\frac{3}{4}$ "	3.21	8.54	...	...	...	$\frac{3}{4}$ "	2.82	8.69
15	"	3.05	8.97	...	...	...	$\frac{3}{4}$ "	2.90	8.98
16	$1\frac{1}{2}$ "	3.08	8.63	...	...	...	$1\frac{1}{4}$ "	2.10	8.72
17	1 "	3.31	8.72	...	...	...	$\frac{3}{4}$ "	2.82	9.00
18	$\frac{3}{8}$ "	4.25	10.45	...	...	...	$\frac{3}{4}$ "	4.41	10.74
19	$1\frac{1}{2}$ "	3.22	8.70	...	...	...	$1\frac{1}{2}$ "	3.50	8.92
21	1 "	3.67	8.79	...	...	...	$1\frac{1}{2}$ "	3.50	9.00
22	$2\frac{1}{4}$ "	3.11	8.89	$1\frac{1}{2}$ galls.	3.60	8.93	$1\frac{1}{2}$ "	4.31	8.91
Whole Herd	$24\frac{1}{2}$ "	3.20	8.89	Average	3.32	8.80	...	...	...
							...	3.32	9.05

NOTE.—There were two changes in the cows since the byre was visited in October. Cow No. 20 was dry, and Cow No. 22 had been added to the herd.

TABLE VIII.

No. of Cow.	Morning Milk, 4.45 a.m.—6th Nov.			Mid-day Milk, 12 noon—6th Nov.			Evening Milk, 5 p.m.—6th Nov.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
	About			About			About		
1	$\frac{1}{2}$ gall.	4.19	9.13	...	...	...	$\frac{5}{8}$ gall.	4.15	9.27
2	$\frac{2}{3}$ "	4.22	8.50	...	...	...	$\frac{2}{3}$ "	2.40	8.72
3	$\frac{3}{4}$ "	3.20	8.80	...	...	...	1 "	3.45	8.82
4	$\frac{1}{2}$ "	3.81	9.11	...	...	...	$\frac{1}{2}$ "	2.30	9.35
5	$\frac{1}{2}$ "	3.58	9.02	...	...	...	$\frac{1}{2}$ "	3.35	9.10
6	$\frac{3}{4}$ "	2.32	9.33	...	...	...	$\frac{1}{2}$ "	3.51	9.37
7	$\frac{1}{2}$ "	2.82	8.68	...	...	...	1 "	3.37	8.80
8	$\frac{2}{3}$ "	2.00	8.63	$\frac{1}{2}$ gall.	3.81	8.60	$\frac{1}{2}$ "	3.72	8.56
9	1 "	2.90	9.01	...	...	...	$\frac{1}{2}$ "	2.70	9.25
10	$\frac{1}{2}$ "	3.80	8.92	...	...	...	$\frac{1}{2}$ "	3.49	9.02
11	$\frac{2}{3}$ "	2.40	8.85	$\frac{3}{4}$ gall.	3.50	9.00	$\frac{1}{2}$ "	3.53	8.97
12	$\frac{1}{2}$ "	2.52	8.89	...	...	...	2 "	2.30	8.92
13	1 "	4.00	9.41	...	...	...	$\frac{1}{2}$ "	3.68	9.55
14	$\frac{3}{4}$ "	3.12	8.59	...	...	...	$\frac{5}{8}$ "	2.72	8.60
15	$\frac{3}{4}$ "	3.40	9.02	...	...	...	$\frac{3}{4}$ "	2.80	9.11
16	$\frac{1}{2}$ "	2.95	8.60	...	...	...	$\frac{1}{2}$ "	2.59	8.56
17	$\frac{3}{4}$ "	3.50	8.81	...	...	...	$\frac{1}{2}$ "	2.90	8.82
18	$\frac{1}{2}$ "	4.22	10.40	...	...	...	$\frac{3}{8}$ "	3.89	10.62
19	$\frac{1}{2}$ "	3.41	8.72	...	...	...	$\frac{1}{2}$ "	3.20	8.90
21	1 "	3.48	8.84	...	...	...	$\frac{1}{2}$ "	3.75	9.06
22	$\frac{2}{3}$ "	2.95	8.83	$\frac{1}{2}$ gall.	4.10	9.02	$\frac{1}{2}$ "	4.30	9.01
Whole Herd	$24\frac{1}{2}$ "	3.10	8.89	...	...	...	...	...	...
				Average	3.86	8.85		3.18	9.02

It will be observed that on the morning of 5th November the percentage of fat in the milk of the whole herd was 3.20 per cent., and that only two of the cows yielded milk which was deficient in fat. On the following morning, the percentage of fat in the milk of the whole herd was 3.10, and on this occasion no fewer than eight of the cows yielded milk which was deficient in fat. It is interesting to note, in connection with the three cows milked thrice daily, that on 5th November the "morning" milk of two of these cows was deficient in fat, while on the following day the "morning" milk of all three cows was similarly deficient. Both at mid-day and in the evening the milk of these three cows was above the standard.

On the evening of 5th November, the percentage of fat in the milk of the whole herd was 3.32, although no fewer than seven of the cows yielded milk which was deficient in fat. On the following evening the percentage of fat was 3.18, and on that occasion eight of the cows yielded milk which was deficient in fat.

It will be seen that although the percentage of fat in the "morning" milk on both 5th and 6th November was above the standard and showed less variation from day to day as compared with previous visits, the percentage of fat in the "evening" milk on each of these days was considerably less than that contained in the "mid-day" or "evening" milk in the samples referred to in Tables IV. and V. Another important factor is that, as the result of having only two milkings, the daily yield of the herd has been considerably reduced.

As stated in previous Annual Reports, I have frequently found that the mixed "morning" milk of a whole herd was deficient in fat. Since January, 1914—when the present practice of procuring samples at byres was commenced—up to December last, the "morning" milk of 27 average-sized herds has been found to be deficient in this respect. In almost every case where these deficiencies were found, the cows were milked three times daily. The practice of milking three times a day, although very common in Aberdeenshire and Kincardineshire, is not common elsewhere, and this may account for the fact that in districts where the cows are milked only twice daily it is the general opinion that it is practically impossible to find the milk of a herd consisting of, say, more than two or three cows, deficient in fat at either of the two milkings.

In my Annual Report for 1924, particulars were given of two series of samples taken at a City byre, in connection with a deficient sample of milk which had been purchased direct from the farmer.

Undernoted is a summary of the results obtained:—

Date 1924.	No. of Cows in Herd.	Morning Milk—6 a.m.		Mid-day Milk—12 noon		Evening Milk—7 p.m.	
		Fat.	Other Solids	Fat.	Other Solids.	Fat.	Other Solids.
6th May	10	2.75	8.93	4.50	8.93	3.32	9.22
18th June	12	3.25	9.02	4.50	8.97	3.17	8.92

The results recorded above are in agreement with what is generally supposed to happen when cows are milked three times daily, viz., that when the intervals between the three milkings are unequal in length, there will be corresponding differences in the percentages of fat contained in the milk at each of the three milkings.

It has usually been contended, however, that there would not be much difference in the quality of the milk produced at each milking from day to day. As, however, the Department had never carried out any experimental work in this direction, arrangements were made to re-visit this byre at each of the three milkings on seven consecutive days, in order to determine what variations there were from day to day in the percentages of fat and solids not fat. It is the practice of the farmer to purchase newly calved cows and then to fatten them off. Accordingly, when the undernoted series of samples was taken, the herd consisted of entirely different cows as compared with the visits in 1924.

Date, 1925.	Morning Milk—6 a.m.			Mid day Milk—12 noon.			Evening Milk—6:45 p.m.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
Oct. 26	About 16 $\frac{5}{8}$ galls.	3.21	8.89	*About 8 $\frac{1}{8}$ galls.	4.39	8.86	About 11 galls.	3.68	9.08
„ 27	16 $\frac{3}{4}$ „	3.37	8.91	10 $\frac{1}{4}$ „	4.91	8.94	10 $\frac{1}{2}$ „	3.50	9.09
„ 28	16 $\frac{7}{8}$ „	3.13	8.98	9 $\frac{1}{2}$ „	4.30	8.90	10 $\frac{7}{8}$ „	4.03	9.08
„ 29	16 $\frac{3}{4}$ „	3.13	8.96	9 $\frac{1}{2}$ „	4.71	9.01	8 „	3.49	9.03
„ 30	15 $\frac{3}{4}$ „	2.85	8.85	9 $\frac{5}{8}$ „	4.83	8.89	9 „	3.54	8.96
„ 31	16 $\frac{1}{8}$ „	3.00	8.87	9 $\frac{3}{8}$ „	4.70	8.91	9 $\frac{5}{8}$ „	3.49	9.08
Nov. 1	16 „	2.94	8.96	9 $\frac{3}{4}$ „	4.84	8.91	8 $\frac{5}{8}$ „	3.29	9.08

NOTE.—The number of cows in the herd on 26th October was 12, but, after the mid-day milking on 29th October, one of the cows was disposed of, and had not been replaced by the time the series of samples was completed.

* Owing to an accident, the milk of one of the cows was not sampled.

It will be observed that—

- (1) On two of the seven mornings the average amount of fat contained in the “morning” milk of the whole herd was under the standard—the percentages being 2.85 and 2.94. The maximum amount of fat in the “morning” milk on any morning was 3.37 per cent., and the maximum range of difference between any two mornings was 0.28 between the 29th and 30th.

Reference to Tables IV., V., and VI. will show that in the herd of 21 cows there referred to, the differences in the percentages of fat in the “morning” milk from day to day were much greater. Thus, on 2nd October, the percentage of fat in a mixed sample of the “morning” milk of the whole herd was 3.32, as compared with 2.80 on the following day—a difference of 0.52 per cent. On 9th and 10th October, the corresponding percentages were 3.28 and 2.70—a difference of 0.58 per cent.

Reference to Tables VII. and VIII. shows that, when this herd was milked twice daily, the differences were considerably less. On 5th November, the percentage of fat in the “morning” milk was 3.20, as compared with 3.10 on the following day—a difference of 0.10 per cent.

- (2) On every occasion the average percentage of fat contained in the “mid-day” milk of the whole herd was very considerably above the standard—the minimum being 4.30, and the maximum, 4.91.

There is, however, a considerable difference in the percentages from day to day. Thus, on 26th October, the percentage was 4.39, as compared with 4.91—a difference of 0.52—on the following day. On the 28th, the percentage fell from 4.91 to 4.30—a difference of 0.61. On the 29th, the

percentage rose to 4.71—a difference of 0.41. On the remaining three days, the difference from day to day was much less.

So far as the “mid-day” milk, therefore, is concerned, the difference in the percentage of fat from day to day was, on several occasions, found to be as great as was the case in the “morning” milk of the herd of 21 cows.

- (3) On every occasion the average percentage of fat contained in the “evening” milk of the whole herd was considerably above the standard—the minimum being 3.29, and the maximum, 4.03 per cent.

As was the case with the “mid-day” milk, there was, on several occasions, a considerable difference from day to day. Thus, on 27th October, the percentage was 3.50, as compared with 4.03—a difference of 0.53. On the 29th October, the percentage fell from 4.03 to 3.49—a difference of 0.54. On the remaining days the difference from day to day was considerably less.

The undernoted information was obtained from the farmer regarding the herd :—

Cow No.	Breed.	Purchase Price.	Date of Purchase.	Approximate Age.	Date of Last Calving.
1	Irish	£39	December, 1924		December, 1924
2	„	36	31st July, 1925		29th July, 1925
3	„	40	13th November, 1924		6th November, 1924
4	„	39	13th February, 1925		6th February, 1925
5	„	40	27th December, 1924		20th December, 1924
*6	.....	.....	.....	Cows average from 7 to 10 years.	.....
7	Irish	£40	6th November, 1924		1st November, 1924
8	„	38	8th August, 1924		1st August, 1924
9	„	40	3rd October, 1924		25th September, 1924
10	„	39	10th July, 1925		2nd July, 1925
11	„	33	7th August, 1925		17th August, 1925
12	„	38	15th October, 1925		7th October, 1925
*1st No. 6	Irish	£36	23rd October, 1925		9th October, 1925
*2nd No. 6	„	36	28th October, 1925		24th October, 1925

Full particulars as to the nature of the feeding for three weeks prior to 26th October—the date on which the first series of samples was taken :—

Morning—Draff, treacle, turnips, straw, and rock salt.

Mid-day—Draff, treacle, turnips, straw, and rock salt.

Evening—Draff, treacle, turnips, hay, and rock salt.

Full particulars as to any change of feeding which has taken place recently.

None.

Date on which cows ceased to receive any outside pasture. If the cows have been pastured on different fields during the summer, give full particulars as to any supposed difference in the quality of the pasture in the different fields.

The cows were taken into byre off outside pasture on 31st August, but were receiving cut grass in byre up to 30th September. Only one field used for grazing purposes, but the cut grass which was given in the byre all summer came from various farms.

What is the practice as regards the cows? Are they purchased in calf or newly calved and then fattened off, or are they re-served from year to year? If the latter, for how many years on an average are the cows kept in milk?

All the cows were purchased newly calved, with the exception of No. 11, which calved in the byre 10 days after coming home. The cows are not re-served, but are all sold fat.

As affording corroboration of the general belief that the practice of milking cows three times daily conduces to the milk at one of the milkings—the milking preceded by the longest interval—being under the standard for fat, the following notes regarding the analysis of the milk of the individual cows in herds is of interest.

On 7th July, samples of the milk of the individual cows in a herd of 13 were obtained at each milking. With the exception of 3 cows, the cows were milked twice daily—5·30 a.m. and 5·30 p.m. Only two of these samples were found to be under the standard, viz., the “morning” milk of two of the three cows milked three times daily. The percentages of fat in the “morning” milk of two of these cows were, respectively, 2·75 and 2·50, while the corresponding percentage in the case of the remaining cow was 3·08. The percentages of fat in the “mid-day” milk of these three cows were, respectively, 5·35, 4·15, and 5·75; while the corresponding percentages in the “evening” milk were 4·01, 3·48, and 4·35. The time of the mid-day milking was 11 a.m.

On 15th July, samples of the milk of the individual cows in a herd of 11 were obtained after each milking. Undernoted are particulars:—

No. of Cow.	Morning Milk—5·30 a.m.			Mid-day Milk—12 Noon.			Evening Milk—5·45 p.m.		
	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.	Quantity Yielded.	Fat.	Other Solids.
1	About $\frac{1}{4}$ gall.	5·57	9·94	About ...	...	...	About $\frac{1}{8}$ gall.	5·35	9·90
2	1 ,,	3·32	9·50	$\frac{3}{4}$ gall.	7·10	9·25	$\frac{1}{2}$,,	5·90	9·22
3	1 $\frac{1}{4}$,,	2·29	9·09	1 $\frac{1}{4}$,,	3·21	9·10	$\frac{1}{2}$,,	1·40	9·11
4	1 $\frac{1}{4}$,,	2·71	8·69	1 ,,	4·10	8·78	$\frac{1}{2}$,,	2·61	8·80
5	$\frac{3}{4}$,,	3·85	8·95	...	...	...	1 ,,	3·60	9·13
6	1 ,,	3·41	8·63	..	...	...	1 $\frac{1}{2}$,,	2·90	8·78
7	1 ,,	3·81	8·90	...	...	...	1 ,,	3·75	8·99
8	1 $\frac{1}{4}$,,	2·35	8·88	1 $\frac{1}{4}$ gall.	5·35	8·96	1 ,,	2·71	9·00
9	$\frac{3}{4}$,,	3·45	8·74	...	...	...	1 $\frac{1}{2}$,,	3·60	8·77
10	1 ,,	3·30	9·12	...	...	...	1 ,,	2·95	8·85
11	$\frac{1}{2}$,,	5·00	10·55	...	...	...	$\frac{1}{2}$,,	4·75	9·12

It will be observed that of the four cows which are milked thrice daily, the "morning" and "evening" milks of three of these cows are deficient in fat, and that the "mid-day" milk of these three cows is above—and in two cases very considerably above—the standard for fat.

On 3rd and 4th November, samples were procured of the "morning" and "evening" milk of a herd of 17 cows. The "morning" milk contained 3.15 per cent. fat and 8.89 per cent. other solids; while the "evening" milk contained 3.45 per cent. fat and 9.14 per cent. other solids. The milking times were 4.30 a.m. and 6.30 p.m. Eight of the cows were, however, being milked three times daily, the third time being at 12 noon. Separate samples were accordingly taken of the milk of these eight cows at each of the three milkings. The "morning" milk contained 2.90 per cent. fat and 8.82 per cent. other solids; the "mid-day" milk, 3.55 per cent. fat and 8.94 per cent. other solids; and the "evening" milk, 3.70 per cent. fat and 8.96 per cent. other solids.

It is of interest to note that the "morning" milk of the eight cows milked thrice daily contained 2.90 per cent. fat, as compared with 3.55 per cent. at mid-day and 3.70 in the evening; whereas the "morning" milk of the whole herd (including the eight cows referred to) contained 3.15 per cent. fat.

Despite the fact that we have frequently found that the mixed milk of a herd may fall under the standard prescribed by the Sale of Milk Regulations, it is interesting to observe that the average percentages of fat and other solids in all the samples, including deficient samples, analysed since 1919 are as follows:—

Year.	No. of Samples.	Fat.	Other Solids.
1919.	262	3.38	8.95
1920,	272	3.48	8.96
1921,	429	3.50	8.89
1922,	445	3.53	8.91
1923,	462	3.58	8.88
1924,	533	3.55	8.88
1925,	524	3.48	8.92

No similar information is available for the earlier years.

In calculating the averages for the year 1921, no account has been taken of two abnormal samples, which contained, respectively, 17.24 per cent. fat and 7.76 per cent. other solids, and 8.23 per cent. fat and 8.69 per cent. other solids. Similarly, in calculating the averages for 1923, no account has been taken of a sample which contained 8.59 per cent. fat and 8.09 per cent. other solids; and in calculating the averages for 1924, no account has been taken of three samples, which contained, respectively, 7.55 per cent. fat and 8.51 per cent. other solids, 7.00 per cent. fat and 8.72 per cent. other solids, and 6.95 per cent. fat and 8.50 per cent. other solids.

Unofficial Samples of Sweet Milk.

The total number of informal samples procured during the year, exclusive of the 42 samples procured at byres, and which have been previously referred to, was 1,104. Of these samples, 86 were taken on delivery at City dairies from consignments which were collected by the dairymen outside the City, and only one of these was found to be under the standard. This consignment was kept under observation for some time, and never again found under the standard.

The total number of informal samples found deficient was 211, and of these no fewer than 183 were samples from the milk of individual cows in herds.

The majority of the remaining deficient samples were taken from suspicious supplies which were being kept under observation as a preliminary to official samples being procured.

Skimmed Milk.

Forty-five official samples of skimmed milk were procured in the course of the year, and all were found genuine.

The following table gives particulars as to the number of samples of skimmed milk taken since 1914:—

Year.	No. of Samples.	No. under Standard.	Percentage under Standard.
1914, . . .	7	0	0·0
1915, . . .	25	0	0·0
1916, . . .	58	11	19·0
1917, . . .	50	2	4·0
1918, . . .	18	1	5·6
1919, . . .	17	2	11·8
1920, . . .	24	1	4·2
1921, . . .	34	0	0·0
1922, . . .	40	0	0·0
1923, . . .	48	0	0·0
1924, . . .	42	0	0·0
1925, . . .	45	0	0·0
Totals, . .	408	17	4·2

It will be observed that since 1st January, 1921, 209 samples have been procured, and all of these have been certified to be genuine.

The average percentages of fat and other solids contained in the samples of skimmed milk procured during the last seven years were as under:—

Year.	No. of Samples.	Fat.	Other Solids.
1919, . . .	17	1·71	8·86
1920, . . .	24	1·17	8·91
1921, . . .	34	1·39	8·89
1922, . . .	40	1·21	8·87
1923, . . .	48	1·13	8·92
1924, . . .	42	0·76	9·21
1925, . . .	45	0·93	9·19

The greater part of the skimmed milk sold in Aberdeen is “separated,” but a considerable proportion is hand-skimmed.

Cream.

Eighteen official samples were procured.

In view of the recommendations of the Inter-Departmental Committee, viz., that ordinary cream should contain 10 per cent. butter fat, the undernoted particulars as to prices and quality are of interest. Half a pint was purchased in each case:—

No.	Price.	Fat.	Remarks.
1, . . .	8d.	20·10	Contained 0·02 Boric Acid.
2, . . .	8d.	22·65	Contained 0·08 Boric Acid.
3, . . .	8d.	14·55	
4, . . .	6d.	8·63	Contained trace of Annatto.
5, . . .	6d.	18·10	
6, . . .	6d.	12·55	Contained trace of Annatto.
7, . . .	8d.	21·90	Contained 0·04 Boric Acid.
8, . . .	8d.	23·10	
9, . . .	4d.	10·12	
10, . . .	8d.	22·77	
11, . . .	6d.	13·79	Contained 0·07 Boric Acid.
12, . . .	4d.	18·01	
13, . . .	6d.	9·96	
14, . . .	8d.	23·55	
15, . . .	6d.	14·59	
16, . . .	6d.	16·04	
17, . . .	8d.	14·82	
18, . . .	8d.	25·47	

It will be observed that one of the samples contained only 8·63 per cent. fat, and another 9·96 per cent. fat, as compared with the minimum of 10 per cent. recommended by the Inter-Departmental Committee. It will further be observed, as has been found in previous years, that there was a great difference in the percentages of fat contained in samples sold at the same price—the percentages ranging

from 14.55 to 25.47. The corresponding percentages in the previous year were 15.27 and 28.30. The results of these analyses indicate that it is extremely desirable that standards for cream should be fixed as soon as possible.

Two of the samples contained slight traces of annatto. These samples were purchased on 2nd March, at which date there was no power to prohibit the addition of colouring matter to cream. On 1st September, the Milk and Dairies (Scotland) Order, 1925, came into operation, and this Order prohibits the addition of any colouring or thickening matter to cream. Ten samples were purchased shortly after the Order came into operation, but no colouring or thickening matter was found in any of these samples.

Butter.

Thirty official samples were purchased, and one was found to be under the standard, containing 23.52 per cent. water. The seller was fined £3.

Two informal samples were analysed at the request of householders, who complained of the quality. Each of these samples was certified genuine.

Margarine.

Seventeen official samples were procured, and one was found to contain 16.95 per cent. water.

By arrangement with the retailer, three unofficial samples were subsequently procured. One sample consisted of a third part of a piece taken out of a block weighing 22 pounds, which was in course of being retailed. This sample contained 15.99 per cent. water. The second sample, which contained 16.90 per cent. water, was another third of the same piece made up by the retailer by means of moist butter cards in the same way as is ordinarily done by him. The third sample, which contained 19.30 per cent. moisture, was the remaining third of the piece, but in this case both the cards and the slab on which the margarine was worked up were treated with more water than is ordinarily used. At the request of the retailer, arrangements were made to procure a sample in course of delivery, but, as the hour of delivery was unknown, this sample was taken "informally." The sample contained 19.20 per cent. moisture. An official sample was subsequently procured in course of delivery, and was certified to contain 15.89 per cent. moisture. The retailer was protected by a warranty, but as he admitted that he might have accidentally added water in the process of making up the margarine, he was advised by his agent that he could not use the warranty as a defence. All the circumstances were fully considered by the Procurator-Fiscal and myself, and, in view of the fact that the unofficial sample procured in course of delivery contained an excess of moisture, it was agreed to settle the case out of Court on payment of the sum of thirty shillings to meet part of the expenses incurred in the taking of the additional samples and in serving the complaint.

In one case it was found that the requirements of the Acts as regards labelling were not being fully complied with, and a letter of warning, accompanied by a circular containing particulars of the requirements, was sent to the offender.

Jams, Jellies, &c.

The undernoted informal samples were purchased, all of which were certified genuine:—

Description.	No of Samples.	Remarks by Analyst.
Black Currant Jam, . . .	2	Samples all examined for added glucose and preservatives—none found. No foreign fruit present, except in a sample of Bramble Jelly, which was labelled—"Consistency improved with other fruit juice," and this sample gave evidence of apple being added.
Bramble Jelly, . . .	2	
Apricot Jam, . . .	1	
Strawberry Jam, . . .	1	
Red Currant Jelly, . . .	1	
Apple Jelly, . . .	1	
Gooseberry Jelly, . . .	1	
Marmalade, . . .	2	
Honey, . . .	2	
Golden Syrup, . . .	3	

Preserved Foods.

Six informal samples of fish paste and seven of meat paste were purchased. Six contained boric, the percentages being 0·03, 0·01, 0·01, 0·03, 0·01, and 0·03, respectively. No benzoates or salicylates were found in any of the samples.

Of the 26 informal samples of tinned foods procured, 25 were taken from old stocks in the possession of provision manufacturers.

Nine of these contained an excessive amount of tin, the quantities being, respectively, 6·2, 4·7, 4·2, 8·0, 11·3, 4·4, 3·2, 3·1, and 6·4 grains per pound. On the manufacturers being communicated with, the consignments from which these samples were taken were destroyed.

Sausages.

Twelve official samples of sausages were purchased. Undernoted are particulars:—

Price per lb.	Nature of Sample.	Nature and Amount of Preservative.
1s.	Pork Sausages.	1·05 grains per lb. sulphur dioxide.
10d.	Beef ..	2·45 grains per lb. sulphur dioxide.
7d.	Pork ..	21·20 grains per lb. boron preservative.
8d.	Beef ..	No preservative.
8d.	Beef ..	3·00 grains per lb. sulphur dioxide.
6d.	Pork ..	20·80 grains per lb. boron preservative.
6d.	Pork ..	39·00 grains per lb. boron preservative.
1s. 5d.	Pork ..	13·49 grains per lb. boron preservative.
1s.	Beef ..	2·94 grains per lb. sulphur dioxide.
1s.	Beef ..	2·45 grains per lb. sulphur dioxide.
1s. 2d.	Pork ..	1·33 grains per lb. sulphur dioxide.
8d.	Beef ..	3·00 grains per lb. sulphur dioxide.

Evidence was sent to the Procurator-Fiscal regarding the three cases where the amount of boron preservative exceeded 20 grains per pound. After communicating with the Scottish Board of Health, the complaints were withdrawn and letters sent to the sellers advising them to use, in future, only the preservative of the nature and in the amounts specified in the Public Health (Preservatives in Food) Regulations (Scotland), 1925.

Sponge Cakes and Sponge Fingers.

Ten informal samples of sponge cakes and five of sponge fingers were purchased.

One of the samples of sponge cake contained 0.16 per cent. boric acid. On inquiry, it was found that the seller had used liquid eggs in the manufacture of the sponge cake, and professed ignorance of any knowledge of any restrictions regarding the use of the same. On examining the invoice, I found that there was stamped thereon, by means of a rubber stamp, a statement regarding the restricted use of liquid eggs. As, however, the statement in the invoice referred to was absolutely illegible, I communicated with the consigners, who undertook to see that in future there will be no cause for complaint in this connection.

Another sample of sponge cake contained 0.23 per cent. boric acid. Liquid eggs were not used in the manufacture of this sample. A sample of the frozen eggs used was procured, and found to contain no boric acid. Samples were also procured of the cream powder and margarine used in the manufacture, when it was found that the cream powder contained no boric acid. The margarine, however, contained 0.35 per cent. boric acid.

Ice Cream.

On 3rd July, fourteen samples of ice cream were purchased. Undernoted are particulars:—

Samples purchased on 3rd July.			Further Sample purchased on 17th August.		
Price.	Fat.	Other Solids.	Price.	Fat.	Other S lids.
6d.	1.33	23.92	6d.	1.54	24.45
6d.	1.43	25.90	6d.	1.77	26.98
6d.	1.94	21.94	6d.	2.81	23.00
6d.	0.29	24.96	6d.	0.90	24.39
9d.	0.96	21.18	6d.	1.12	21.25
9d.	2.78	28.53	...	...	...
6d.	2.07	19.93	6d.	1.90	22.93
6d.	2.47	20.58	...	...	...
6d.	3.33	21.21	...	...	...
6d.	3.22	20.17	...	...	...
5d.	3.97	23.57	...	...	...
6d.	3.03	19.65	...	...	...
6d.	3.35	19.18	...	...	...
6d.	2.46	17.63	...	...	...

Ice cream is, of course, not sold by measure, but the quantity supplied in each case was about the same. It will be observed that one of the samples for which 9d. was paid contained only 0·96 per cent. fat. Another sample contained only 0·29 per cent. fat. Letters were sent to the sellers of these two samples pointing out that the ice cream was of very poor quality. Letters were also sent to the sellers of all samples which contained less than 3 per cent. fat, pointing out to them that their ice cream was of poor quality, and that the price charged by them was at least as high as was being charged by other makers for a much better article.

A circular was also sent to all manufacturers and sellers of ice cream, informing them that samples of ice cream had been purchased recently, when it was found that, although a number of the samples contained more than 3 per cent. milk fat, other samples were obviously made with skimmed or separated milk. The suggestion was made that it was advisable, in the public interest, that only sweet milk should be used in the manufacture of ice cream. It was further stated in the circular that samples would again be purchased in the near future. This was done on 17th August. Undernoted are particulars:—

Price.	Fat.	Other Solids.	Price.	Fat.	Other Solids.
6d. . .	2·81	23·00	6d. . .	3·40	20·66
6d. . .	0·90	24·39	6d. . .	2·78	25·61
6d. . .	0·18	22·91	6d. . .	1·90	22·93
6d. . .	2·52	24·59	6d. . .	1·12	21·25
6d. . .	1·77	26·98	6d. . .	2·74	23·60
6d. . .	1·54	24·45	6d. . .	1·42	21·97
6d. . .	3·19	24·98	6d. . .	3·11	21·22
6d. . .	2·51	25·15	6d. . .	1·15	26·72

It will be observed that, despite the terms of the circular referred to, thirteen out of the sixteen samples contained less than 3 per cent. fat. Samples were taken from six of the shopkeepers who had on the first-mentioned occasion sold ice cream containing fat ranging from 0·29 to 2·07 per cent. With one exception, it will be observed that there was very little improvement in the quality of the ice cream.

Aerated Waters.

Four informal samples were procured and examined for lead, copper, and other poisonous metals, but none were found.

Fruit Wines.

Nine informal samples were purchased. Undernoted are particulars:—

Nature of Sample.	Nature and Amount of Preservative.
Lemon Crush, . . .	None.
Orange Wine, . . .	1·7 grains per pint salicylic acid, and 4·8 grains per pint benzoic acid.
Fruit Wine, . . .	5·2 grains per pint salicylic acid.
Black Currant Wine, . .	1·0 grains per pint sulphur dioxide.
Lemon Squash, . . .	2·0 grains per pint sulphur dioxide.
Black Currant Wine, . .	1·2 grains per pint sulphur dioxide.
Lime Fruit Squash, . .	3·1 grains per pint salicylic acid.
Raspberry Vinegar, . .	3·0 grains per pint sulphur dioxide.
Strawberry Syrup, . .	3·5 grains per pint salicylic acid.

Coffee Essence.

In none of the nine informal samples purchased was any preservative found.

Apples.

Twenty-six informal samples were procured and analysed for the presence of arsenic. Nine of the samples were procured in shipping sheds and seventeen in warehouses or shops. Sixteen of these samples contained no arsenious oxide, while one contained a doubtful trace.

Undernoted are particulars as to the quantities of arsenious oxide contained in the remaining samples:—

Kind of Apple.		Grains per lb.
Jonathan, O.K., B.C., Canada,	.	0·001
Jonathan, "C" Grace, U.S.A.,	.	0·006
Jonathan, Ex Fancy, Ace Brand, U.S.A.,	.	0·003
Do.	do.,	0·011
Do.	do.,	0·004
Jonathan, Fancy Ace Brand, U.S.A.,	.	0·007
Do.	do.,	0·001
Do.	do.,	0·011
Jonathan, White Ribbon, U.S.A.,	.	0·011

Grapes.

At the request of a wholesale fruit merchant, two samples of grapes were analysed. It was found that the grapes had been sprayed with lime and sulphur.

Spirits.

Fourteen official samples of spirits—6 whisky, 5 rum, 2 brandy, and 1 gin—were purchased. One unofficial sample of whisky was purchased, as the quantity in the receptacle at the time of purchase was not large enough to divide into three parts.

All these samples were certified genuine, with the exception of a sample of whisky which was certified to be 50·20 degrees under proof. Attached to the receptacle from which the whisky was sold was the following notice:—"All spirits sold here, unless otherwise asked for, are reduced to 49 degrees U.P."

A plea of guilty was tendered, and a fine of £3 was imposed.

Drugs.

Thirty informal samples were procured, and all certified genuine, with the exception of a sample of borax, which contained 10 parts per 1,000,000 of arsenic.

Samples of cod liver oil emulsion and malt extract with cod liver oil were procured in order to determine the percentages of cod liver oil contained therein.

Undernoted are particulars:—

A.—Cod Liver Oil Emulsion.

Weight of Contents.	Price.	Oil by Weight.	Oil by Volume.	Guarantee.	Description on Bottle.
		Per cent.	Per cent.		
3 $\frac{3}{4}$ ozs.	1/-	33·68	...	...	Cream Emulsion of Cod Liver Oil.
6 $\frac{1}{2}$ „	1/6	32·37	...	...	Cream Emulsion of Cod Liver Oil, with Hypophosphates.
6 $\frac{1}{2}$ „	1/6	33·43	...	...	Do. do. (Calcium and Sodium)
7 „	1/3	30·79	...	...	Do. do. do. do.
6 „	1/6	33·36	...	33 $\frac{1}{3}$	Cream Emulsion of Pure Cod Liver Oil, with Hypophosphates of Lime, Potash and Soda, guaranteed to contain 33 $\frac{1}{3}$ per cent. Cod Liver Oil.
6 $\frac{1}{2}$ „	1/6	44·44	50·04	50 (not stated whether volume or weight)	Cod Liver Oil Emulsion, guaranteed to contain 50 per cent. of Purest Cod Liver Oil.

B.—Malt Extract with Cod Liver Oil.

Weight of Contents.	Price.	Oil by Volume.	Guarantee by Volume.	Description on Bottle.
		Per cent.	Per cent.	
18 ozs.	1/3	11·53	...	Guaranteed Pure.
18 „	1/4	15·00	15·00	Torch Brand—Allen & Hanbury—containing 15 per cent., by volume, of Cod Liver Oil.
18 „	1/3	7·11	...	Pure Malt Extract, with Cod Liver Oil.
18 „	1/3	15·10	...	Guaranteed Pure.
18 „	1/4	15·00	15·00	Torch Brand—Allen & Hanbury—containing 15 per cent., by volume, of Cod Liver Oil.
17 „	1/6	7·35	...	Golden Grain Extract of Malt and Cod Liver Oil. Guaranteed Pure.

PUBLIC HEALTH (CONDENSED MILK) REGULATIONS (SCOTLAND),
1924.

Seventeen samples of condensed milk were purchased in order to see whether the requirements of the above-mentioned Regulations were being complied with. All the samples were found to be properly labelled.

All these samples were analysed by the Public Analyst, with the undernoted results:—

Total Milk Solids.	Fat.	Calculated Pints.	Stated Pints.
27·20	0·36	$1\frac{7}{8}$	$1\frac{3}{4}$
34·05	9·75	$\frac{7}{8}$	$\frac{7}{8}$
36·87	9·65	$\frac{7}{8}$	$\frac{7}{8}$
26·00	0·60	$1\frac{3}{4}$	$1\frac{3}{4}$
29·27	0·26	$1\frac{7}{8}$	$1\frac{3}{4}$
32·00	9·05	$1\frac{5}{8}$	$1\frac{5}{8}$
31·00	9·00	2	2
29·55	0·12	$1\frac{7}{8}$	$1\frac{3}{4}$
31·52	9·06	$\frac{3}{4}$	$\frac{3}{4}$
27·28	0·30	$1\frac{3}{4}$	$1\frac{3}{4}$
34·25	0·29	$1\frac{7}{8}$	$1\frac{3}{4}$
31·63	9·00	2	2
33·86	9·43	$1\frac{3}{4}$	$1\frac{3}{4}$
28·70	0·19	$1\frac{7}{8}$	$1\frac{3}{4}$
31·37	9·03	2	2
34·32	10·15	$1\frac{7}{8}$	$1\frac{7}{8}$
31·93	9·16	$1\frac{1}{2}$	$1\frac{1}{2}$

PUBLIC HEALTH (DRIED MILK) REGULATIONS (SCOTLAND), 1924.

Undernoted are particulars supplied by the Public Analyst regarding the samples procured:—

Nature of Sample.	Carbo-Hydrate.	Albumenoids.	Fat.	Calculated Pints.	Stated Pints.
Berina Food,	56·91	19·57	16·88*	...	...
"Almata,"	50·15	12·40	26·02*	..	...
Dried Full Cream Milk, . . . . .	...	...	26·63	4½	4½
Horlick's Malted Milk,	74·78	11·88	7·18*	...	...
Modified Dried Full Cream Milk, . . . . .	...	...	24·32	2	2
Allenbury's Milk Food, No. 1,	66·01	10·25	17·80*	...	...
Dried Full Cream Milk, . . . . .	...	...	26·45	2	2
Modified Dried Full Cream Milk, . . . . .	...	...	25·13*	2	2
Albulactin, . . . . .	...	80·13	...	...	...
Modified Dried Full Cream Milk, . . . . .	...	...	23·40	5½	5½
Allenbury's Milk Food, No. 2,	73·47	10·13	9·87*	...	...
"Glaxovo,"	62·74	17·92	13·08*	...	...
Partly Skimmed Milk, Half Cream, . . . . .	...	...	13·44	3¾	3¾
Partly Skimmed Milk, Three-quarter Cream	...	...	18·44	4½	4½
Partly Skimmed Milk, Half Cream, . . . . .	...	...	16·30	5½	4½

* Contain less than 70 per cent. Milk Solids, and therefore do not come under the Dried Milk Regulations.

All the above-mentioned samples were supplied in response to a request for dried milk.

At the same time, a sample of Allenbury's Malted Food No. 3 was purchased, and this was certified to contain 84·24 per cent. carbo-hydrate, 8·78 per cent. albumenoids, and 1·00 per cent. fat. A sample of Benger's Food, as supplied to the Health Department, was also analysed and certified to contain 81·33 per cent. carbo-hydrate, 9·19 per cent. albumenoids, and 1·25 per cent. fat.

THE SALE OF FOOD ORDER, 1921.

The number of inspections made in connection with this Order, which deals with the labelling of imported meat and imported eggs, was 793. Of these, 145 visits were paid to shops where butcher meat was sold, and 648 visits paid to shops where eggs were sold. In only two cases it was found that the requirements of the Order were not being strictly complied with, and warnings were given to the offenders. On subsequent inspections, it was found in each case that the requirements were being fully complied with.

RAG FLOCK ACT, 1911.

Thirteen samples were procured under the above Act, and duly analysed.

Seven of the samples were procured from upholsterers, 3 from bedding manufacturers, and 3 from rag flock manufacturers.

Twelve of the samples conformed with the standard prescribed by the Regulations. The remaining sample, which was procured from a firm of bedding manufacturers, contained 252·5 parts of chlorine, as compared with the standard of 30 parts of chlorine per 100,000 parts of flock prescribed by the Regulations. The sample was procured from an unopened bale of flock, manufactured locally. A plea of guilty was tendered, and a fine of £3 imposed.

Four other samples—Nos. 1, 4, 5, and 10—supplied by the same manufacturer were procured at the same time. It will be observed that the amount of chlorine in each of these samples was considerably under the standard.

Undernoted are particulars of all the samples procured :—

No. of Sample.	Chlorine (of Chlorides) per 100,000 parts of Flock.
1,	10·7
2,	16·6
3,	252·5
4,	9·3
5,	14·4
6,	15·0
7,	10·6
8,	13·1
9,	18·1
10,	10·6
11,	8·1
12,	9·3
13,	9·3

POISONS AND PHARMACY ACT, 1908.

No fresh applications were received for permission to sell substances to be used exclusively in agriculture or horticulture. Applications for the renewal of existing licences were made and granted. The arrangements for keeping poisonous substances were found to be satisfactory.

FERTILISERS AND FEEDING STUFFS ACT, 1906.

During the year, 11 informal samples were procured from manufacturers or wholesale merchants in order to see that the requirements of the above Act were being complied with.

Undernoted are particulars as to the samples procured:—

FEEDING STUFFS.

DESCRIPTION OF SAMPLE.	ANALYSIS AS GUARANTEED.		ANALYSIS AS FOUND.	
	Oil per cent.	Albuminoids per cent.	Oil per cent.	Albuminoids per cent.
Decorticated Cotton Cake Meal,	7.0	43.0	7.69	43.1
Fish Meal,	5.0	60.0	4.02	64.38
Meat Meal,	20.0	50.0	22.0	49.5
Laco for Calves,	18.0	24.0	16.25	21.65
Poultry Food,	6.0	10.0	6.55	10.90
Fish Meal,	2.0 to 5.0	55.0 to 60.0	5.0	56.25

FERTILISERS.

DESCRIPTION OF SAMPLE.	ANALYSIS AS GUARANTEED.					ANALYSIS AS FOUND.				
	Nitro-gen.	Citric Soluble.	Soluble Phos-phate.	In-soluble Phos-phate.	Potash.	Nitro-gen.	Citric Soluble.	Soluble Phos-phate.	In-soluble Phos-phate.	Potash.
	%	%	%	%	%	%	%	%	%	%
Bone Meal,	4.25	...	...	46.0	...	4.14	...	...	47.0	...
Superphosphates, . . . . .	...	...	35.0	...	...	...	...	34.77	...	...
Bone Flour,	1.0	...	..	65.0	...	0.80	...	...	65.9	...
Potato Manure,	3.0	5.0	...	8.0	4.25	2.71	5.13	...	8.90	3.96
Superphosphates, . . . . .	...	...	38.0	...	...	...	...	37.8	...	...

All the samples conformed, when allowance is made for the "Limits of Error" provided by the Act, with the guarantees.

SHOPS ACT, 1912, AND THE SHOPS (EARLY CLOSING) ACTS, 1920 AND 1921.

The provisions of these Acts, and the Half-Holiday Orders and Closing Orders made under the principal Act, have been regularly enforced. In all, 11,215 inspections were made by the Sanitary Staff during the year. Of these inspections, 2,214 were made to shops, where full inquiry was made as to whether the various requirements of the Shops Act, 1912, were being complied with. The remainder of the inspections were in connection with the closing of shops. In addition to these inspections, the Chief Constable reported all contraventions of the Shops (Early Closing) Acts which came under the observation of the Police.

Sixteen complaints regarding any alleged contravention of the Shops Act, 1912, were received during the year. All these complaints were immediately attended to, and, when necessary, steps taken to see that the requirements of the Act were fully complied with.

Half-Holiday Orders.

There are sixteen Half-Holiday Orders in force in the City. No additional Order was made in the course of the year.

The Aberdeen Shops (Weekly Half-Holiday) Amendment Order, 1914, provides that, during the weeks in which Christmas Day and New Year's Day occur, the half-holiday for the shops affected shall be such day as the occupier may specify in a notice affixed in the shop, as provided by Section 4 (3) of the Shops Act, 1912.

During Christmas and New Year weeks, it was found that nine shopkeepers had failed to close their shops not later than one o'clock in the afternoon of one week day. As in each case the shopkeeper maintained that the contravention was due to a misunderstanding on his part, and as the shops were closed immediately after the contraventions were discovered, no further action was taken.

Early in the forenoon of Christmas Day, a shop, which had not been closed for the usual weekly half-holiday on Saturday, 19th December, was found to be open for the "serving of customers," although no assistants were being employed. The shop was closed immediately after the Inspector's visit, and, on subsequent visits being paid in the course of the day, it was found that the shop had not again been opened. No further action was accordingly taken.

No other contravention of any of the Half-Holiday Orders was discovered during the year.

Closing Orders under Section 5 (for Fixing the Closing Hour for the Several Days of the Week).

There are six Closing Orders in force, viz., for chemists, boot and shoe dealers, hairdressers, drapers, ironmongers, and butchers. No additional Order has been made in the course of the year. The provisions of these Orders are, so far as known, well observed. The shops of two drapers were found open after the prescribed closing hours. As these shopkeepers had only recently commenced business, no proceedings were instituted. On subsequent inspections being made, it was found that the shops were being closed at the required hours.

In December, a complaint was received from the Secretary of a local Meat Traders' Association to the effect that a number of shopkeepers were selling sausages after the closing hours prescribed in the Butchers' Closing Order. Immediately after the original Order came into operation in November, 1913, a circular was sent to all grocers and provision dealers in the City informing them that, in the opinion of the Procurator-Fiscal and myself, the sale of such articles as beef and pork sausages, fresh pork, and Canterbury lamb formed part of the ordinary trade of a butcher, and that, accordingly, these articles could not be sold by any class of shopkeeper after the closing hours specified in the Butchers' Closing Order. At

that time, butchers' shops did not require to be closed until 9 p.m. on Thursdays and 10 p.m. on Saturdays. The result was that little difficulty was experienced in getting this requirement complied with, and in only one case was it necessary to institute legal proceedings for a contravention of this nature.

In July, 1922, however, the butchers obtained a new Closing Order, which requires that butchers' shops must be closed at 7 p.m. on every day of the week. As the shops of grocers and provision dealers do not require to be closed on ordinary week nights till 8 p.m., and on Saturdays till 9 p.m., it would appear from the complaint as if certain shopkeepers were contravening the Order. Immediately after receiving the complaint, another circular in similar terms was issued to all grocers and provision dealers. The Grocers' Association, however, take up the position that the sale of pork sausages forms part of the business of a grocer and not of a butcher. If, therefore, any contravention is discovered, it will be necessary to apply to the Court for a decision as to whether such articles can be sold after butchers' shops are closed.

Section 1 (1) and (2)—Shop Assistants' Half-Holiday.

A complaint was received regarding three assistants in a restaurant not getting the prescribed weekly half-holiday or the prescribed dinner and tea intervals. When this complaint was investigated, it was found that one of the assistants—a "young person"—had on two successive weeks been employed for more than 74 hours. Proceedings were instituted against both the proprietor and the manageress, and each was fined 30s., with 27s. 6d. of expenses.

A complaint was also received regarding a lad, sixteen years of age, employed in selling milk from a retail dairyman's cart not receiving the weekly half-holiday or the prescribed tea interval. It was also alleged that the boy was being employed for more than 74 hours per week. On inquiry being made, it was found that the conditions of the boy's employment were as alleged, but the Procurator-Fiscal and myself were not satisfied that the boy was employed "in or about a shop." We accordingly communicated with the Secretary for Scotland, asking whether any case of a similar nature had been before the Court, and also asking what his views were of such a case.

The following reply was received:—

As the Secretary for Scotland had not previously had a similar case brought to his notice, he thought it desirable to consult with the Home Office, but it appears that no case has come to their notice which would afford any clear guidance on the question.

The Secretary for Scotland has no authority to advise in an interpretation of statute nor as to whether in any particular case a prosecution should be undertaken. He is disposed to take the view, however, that the lad in question is not a shop assistant as defined in Section 19 of the Shops Act, 1912, as he is not "wholly or mainly employed in a shop." Moreover, it appears to him on the information submitted to be doubtful whether the circumstances of the lad's employment are such that his hours of work are subject to the restrictions imposed by Section 2 of the Act on the employment of a young person "in or about a shop."

In view of the opinion expressed, no proceedings were instituted.

In four out of the 2,214 shops inspected it was found that the requirements as regards the weekly half-holiday were not being strictly complied with. In none of these cases, however, was it thought necessary to institute legal proceedings. Warnings were given to the shopkeepers, and subsequent inspections proved that there was no longer any cause for complaint.

In 596 shops it was found that the assistants' half-holiday notice was either awaiting or was not properly filled up. Warnings were given in every case.

Section 1 (3)—Intervals for Meals.

Several complaints were received from the National Amalgamated Union of Shop Assistants, &c., regarding the requirements as to meal hours not being complied with.

On 12th February, a complaint was received to the effect that on one day of the week the shop assistants were not receiving an uninterrupted interval of half an hour for tea. On inquiry, it was found that the complaint was substantiated, and, following the usual practice in such cases, a letter of warning was sent to the shopkeeper. The Union were, however, of opinion that a prosecution should have been instituted, and sent a representation to the Town Council to this effect. In October last, I was instructed by the Bills and Law Committee to report on the general administration of the Shops Acts. This report is at present under consideration.

The practice hitherto followed has been to submit the evidence obtained regarding any contravention to the Burgh Procurator-Fiscal, who, in virtue of his appointment, conducts all Court proceedings under the Act, which are instituted in the name of the Sanitary Inspector. The evidence regarding each contravention is fully considered by the Fiscal and the Inspector, and thereafter a decision is come to as to whether a prosecution should be instituted or whether, in lieu of prosecution, a letter of warning should be sent to the offender. In all cases where letters of warning are sent, re-visits are made in order to determine that there is no longer any cause for complaint.

Two prosecutions were instituted against shopkeepers who had each previously received warnings regarding the requirements as to meal intervals. One shopkeeper was charged with failing to give the prescribed tea interval to four assistants, and with failing to exhibit the weekly half-holiday and "young persons" notices. He pled guilty, and was fined £3, with 27s. 6d. of expenses.

In the second case, the shopkeeper was charged with failing to give two of his assistants the prescribed dinner interval, inasmuch as one assistant received her dinner interval from 10.45 a.m. to 11.45 a.m., while the second assistant received the interval between 2 and 3 p.m. The shopkeeper pled "not guilty," and it was contended on his behalf that as neither of these assistants was *employed*—i.e., actually working for the full period of three hours—between 11.30 a.m. and 2.30 p.m., the provisions of the Act as regards the dinner interval were not applicable

to them. The shopkeeper was, at the same time, charged with employing two of his assistants for periods of more than six hours without an interval of at least twenty minutes being allowed during the course thereof. A plea of "guilty" was tendered as regards this charge, and an admonition was given. The Sheriff held that there had been a contravention of the Act in respect of the dinner intervals, and imposed a penalty of 5s. for each offence, with 37s. of expenses. An appeal was intimated, but this has been dismissed.

In the course of making the routine inspections referred to, 15 irregularities in respect of the dinner interval, and the same number of irregularities in respect of the tea interval, were discovered. Proceedings were instituted in connection with one of the dinner interval contraventions. Warnings were given in all the remaining cases.

Section 2 (1) and (3)—Hours of Employment of Young Persons under the age of 18 years.

Three complaints were received regarding alleged contraventions of this Section—which requires that young persons must not be employed more than 74 hours, including meal times, in one week. In one case legal proceedings were instituted; in the second case the boy's statements were not only uncorroborated, but were disproved by the other witnesses; while the remaining complaint was concerning the dairy carter already referred to.

No contraventions of this Section were discovered by the Inspectors in the course of their routine inspections.

In 404 shops where "young persons" were being employed, it was found that the prescribed notice was not being exhibited. Warnings were given in every case.

Section 3—Seats for Female Shop Assistants.

This Section requires that in all rooms of a shop where female assistants are employed in the serving of customers, the occupier of the shop shall provide seats behind the counter or in such other position as may be suitable for the purpose—the seats to be in the proportion of not less than one seat to every three assistants.

In thirteen shops it was found that the requirements of this Section were not being strictly complied with. On the attention of the shopkeepers being directed to this, proper seats were immediately provided.

Section 4 (1) and (3)—Half-Holiday Closing of Shops.

No complaints were received regarding the occupiers of "mixed" shops selling non-exempted articles on the afternoon of the weekly half-holiday.

It is the practice of the Department to issue warning circulars to all new occupiers of "mixed" shops, and during the year 97 such circulars were issued.

Section 9—Proceedings as to Trading elsewhere than in Shops.

No contraventions of this Section were discovered.

Section 10 (1)—Conditions for Mixed Shops remaining open on Weekly Half-Holiday.

The attention of 176 shopkeepers was drawn to the fact that the notices required under this Section were not being exhibited. The Act requires that on the afternoon of the weekly half-holiday these notices must be exhibited both on the interior and on the exterior of the shop. In the majority of the cases referred to, only one notice was being exhibited.

Shops (Early Closing) Act, 1920, as Amended by the Act of 1921.

By these Acts, the Order made in 1917 under the Defence of the Realm Regulations is continued in force, and has effect in the area of any Local Authority as if it were a Closing Order made and confirmed under the Shops Act, 1912.

In 19 cases proceedings were instituted, and convictions obtained in each case. The penalties, including expenses, aggregated £29 14s. 6d. The number of prosecutions in each of the four preceding years was 20, 22, 18, and 29.

As has been stated in a previous Report, it was originally intended that the Shops (Early Closing) Act, 1920, should cease to become operative on 31st December, 1921. However, in August, 1921, the Act was amended so as to permit of the sale of fruit, table waters, sweets, chocolates, or other sugar confectionery, or ice cream until 9.30 p.m. on week days other than Saturdays, and 10 p.m. on Saturdays. By the Expiring Law Continuance Acts, the Shops (Early Closing) Acts have been continued from year to year, and have recently been extended up to 31st December, 1926. These Acts do not compel shops to be *closed* at a prescribed hour, as the sale of certain articles is permitted beyond the prescribed closing hours, so that the shop can be kept open for the sale of these articles. The result is that there is great temptation offered to the shopkeeper who is entitled to keep his shop open for the sale of certain articles to sell any article that may be asked for.

Circulars have on several occasions been sent to various classes of shopkeepers, warning them about certain of the requirements of these Acts regarding which there appeared to be doubt or misunderstanding. Despite these warnings and the numerous prosecutions which have taken place since these restrictions came into operation, there is no doubt that some shopkeepers are making a practice of risking the sale of non-exempted articles. The result is that neighbouring shopkeepers who are abiding by the law feel that they have a grievance, and look to the authorities for protection.

As has been suggested in previous reports, it might be desirable for the legislature to consider whether the time has not now come when these restrictions, which were introduced as a War measure, should either be relaxed or abolished.

EXTERMINATION OF RATS.

The agreement entered into in 1917 between a number of citizens—mainly the proprietors of food warehouses and similar premises—under which the services of the two Corporation ratcatchers were made available to the contributors to the scheme, is still in operation. The number of contributors at the end of 1925 was 55, being one less than in the previous year. The number of visits paid to their premises during the year was 1,791, as compared with 1,737 in the previous year.

The services of the ratcatchers were also made available, on request, for 145 citizens' premises which were found to be infested with rats, on payment of the charges fixed by the Sub-Committee in charge of the scheme. The number of similar premises dealt with in the previous year was 101.

The ratcatchers periodically visit all open places, such as rubbish tips, railway embankments, burns, &c., and also all premises belonging to the Town Council which are known to be infested with rats.

Undernoted are particulars regarding the number of poisoned baits laid during the year :—

	Contributors' Premises.	Non-Contributors' Premises.	Town Council Premises.	Total.
Number of pieces of Poison Feed laid,	43,195	31,882	10,386	85,463
Number of pieces of Poison Feed eaten,	13,349	8,807	4,953	26,109
Liquid Poison laid, . . .	9 pints.	5 pints.	...	14 pints.
Liquid Poison consumed, .	$\frac{1}{2}$ pint.	$\frac{1}{4}$ pint.	...	$\frac{3}{4}$ pint.
Dry Poison Feed (Mice) laid,	27 ounces.	4 ounces	..	31 ounces.
Dry Poison Feed (Mice) eaten,	3 $\frac{1}{4}$ do.	$\frac{1}{2}$ ounce	...	4 $\frac{1}{4}$ do.

Following upon a suggestion made by the Board of Agriculture, a "Rat Week" was, as in previous years, held during the last week of March. The only poison sold was red squill, which is non-injurious to human beings and domestic animals. Each purchaser was supplied with a set of instructions giving full information as to how the poison was to be used, and was also supplied with a stamped post card, on which he was asked to give particulars as to the results obtained. It was recommended that baits should be laid at least three times. Between 2,000 and 3,000 leaflets, inviting the occupiers of all rat-infested premises to take part in the campaign, were distributed. Advertisements were also inserted in the local press. During "Rat Week" the Department's ratcatchers were solely employed in laying poisoned baits in rubbish tips, burns, sewers, and other public places.

As a supplement to the work done by the Department in connection with the extermination of rats, red squill is continuously on sale in the Public Health office. Scarcely a day passes without some poison being sold.

Undernoted are particulars as to the quantities of poison sold during "Rat Week" and also during the remainder of the year:—

	RAT WEEK.			DURING REMAINDER OF YEAR.		
	City Purchasers.	Country Purchasers.	Total.	City Purchasers.	Country Purchasers.	Total.
5-oz. bottles . . .	122	44	166	271	89	351
10-oz. do. . . .	47	40	87	117	54	171
25 oz. do. . . .	9	12	21	28	16	44
TOTALS,	178	96	274	416	150	566

The quantity of poison sold during "Rat Week" was greater than in the corresponding week in the previous year, the number of City purchasers being 178, and of country purchasers, 96, as compared with 134 and 85, respectively. The quantity sold in the Public Health office during the remainder of the year was also greater, the number of individual purchasers being 566, as compared with 460 in the previous year.

Undernoted is a summary of the information contained in the post cards:—

Rat Week—30th March to 4th April.

CITY PURCHASERS.							
Number of Post Cards.		First Occasion.		Second Occasion.		Third Occasion.	
Issued.	Returned.	Laid.	Missing.	Laid.	Missing.	Laid.	Missing.
178	34	724	342	670	229	546	125
Percentage of Baits missing		47 per cent.		34 per cent.		23 per cent.	

Number of baits laid by ratecatchers in public places,	6,476
Number of such baits taken away,	3,673
Percentage taken away,	57 per cent.

COUNTRY PURCHASERS.							
Number of Post Cards.		First Occasion.		Second Occasion.		Third Occasion.	
Issued.	Returned.	Laid.	Missing.	Laid.	Missing.	Laid.	Missing.
96	21	577	268	400	155	277	98
Percentage of Baits missing		46 per cent.		39 per cent.		35 per cent.	

Office Sales during remainder of Year.

CITY PURCHASERS.							
Number of Post Cards.		First Occasion.		Second Occasion.		Third Occasion.	
Issued.	Returned.	Laid.	Missing.	Laid.	Missing.	Laid.	Missing.
416	41	874	569	846	575	561	322
Percentage of Baits } missing . . . }		66 per cent.		68 per cent.		57 per cent.	

COUNTRY PURCHASERS.							
Number of Post Cards.		First Occasion.		Second Occasion.		Third Occasion.	
Issued.	Returned.	Laid.	Missing.	Laid.	Missing.	Laid.	Missing.
150	12	380	310	193	126	147	76
Percentage of Baits } missing . . . }		82 per cent.		65 per cent.		52 per cent.	

As part of their routine duty, all the District Inspectors keep a lookout for rat-infested premises, and, when such are found and sufficient steps are not being taken to exterminate the rats, a notice is served under the Rats and Mice Destruction Act, 1920, upon either the occupier or owner. The number of such notices served during the past year was 81. The corresponding number in each of the four preceding years was, respectively, 55 in 1924, 54 in 1923, 108 in 1922, and 176 in 1921.

There is no doubt that the continuous work which has been carried on in the City during the past eight years in connection with the extermination of rats is having good effect. Nevertheless, it is necessary in certain premises, on account of the difficulty of making such premises rat-proof, to carry on ceaselessly the work of extermination. Whenever possible, every effort is made to prevent re-infestation.

Valuable assistance continues to be rendered by the Burgh Surveyor's department in raising the pavements and closing up the rat runs.

COMMON LODGING-HOUSES AND HOUSES LET IN LODGINGS.

At the end of 1925, there were only two common lodging-houses in the City, viz., the Sailors' Home and the Home for Deep Sea Fishermen.

The number of houses let in lodgings on the register was 39, being the same number as in the previous year. This number includes four houses which were formerly registered as common lodging-houses, but which, on account of the charge per night having been in 1920, increased beyond the sum of 6d., were transferred to the register of houses let in lodgings.

Twenty-six day visits and 24 night visits were made to the common lodging-houses, while 511 day visits and 168 night visits were paid to the houses let in lodgings. The houses were all kept in good repair and in a cleanly condition, and no serious contraventions of the Bye-laws were discovered. Particular attention is paid to the cleanliness of the bedding.

SANITARY CONDITION OF THEATRES, MUSIC HALLS, CINEMAS, &c.

Following upon the circular letter from the Scottish Board of Health, dated 6th December, 1920, all the places of public entertainment were periodically visited during the year. The number of licensed places of amusement is 46, and the number of visits paid was 159.

Details of the work done are given in Appendix II. (I).

PORT SANITARY INSPECTION.

In accordance with the scheme of Port Sanitary Administration prepared by the Local Authority and approved by the Scottish Board of Health, 398 vessels—200 British and 198 foreign—were inspected during the year. Of these, 49 were found to be unsatisfactory.

Careful inquiry is made regarding the presence of rats. Preventive measures were taken on board all vessels arriving from plague suspected ports. These consisted of the provision of rat-guards for all mooring ropes and hawsers to prevent the escape of rats on shore, and the taking of destructive measures on board. Specimens of rats secured were submitted for bacteriological examination, and in all cases negative results were obtained. The services of the Department's rat-catchers were employed in connection with 7 vessels.

Eight vessels, from which cases of infectious disease were removed, were disinfected. Six trawlers, from which some members of the crews were removed on account of scabies and vermin, were also disinfected.

Undernoted are particulars as to the vessels visited:—

<i>Foreign—</i>	Number Visited.	Found Satisfactory.	Found Unsatisfactory.	Number of Notices Issued.
Steamers . . .	178	133	28	23
Motor . . .	4	4	—	—
Sailing . . .	3	3	—	—
Fishing . . .	13	10	2	1
Total Foreign .	198	150	30	24
<i>Coastwise —</i>				
Steamers . . .	175	158	15	9
Motor . . .	3	2	1	—
Sailing . . .	3	3	—	—
Fishing . . .	19	13	—	3
Total Coastwise	200	176	16	12
Total Foreign and Coastwise	398	326	46	36

Nuisances and Defects Discovered.

FORECASTLES, ROOMS, &c.

Floors dirty	9	Inadequate ventilation	3
Floors defective	4	Decks leaking	2
Walls dirty	7	Side Plates leaking	3
Bunks and Bedding dirty	4	Gear stored in sleeping apart- ments	4
Food Lockers dirty	2	Infested with vermin	10
Tables and Benches dirty	1	Accumulation of refuse	2
Port-lights defective	16		

W.C.'s, WASH-HOUSES, &c.

Floors dirty	10	Defective w.c.'s	4
Walls dirty	2	Defective water supply	1
Seats or Basins dirty	16	Scuppers choked	2
Unsuitable ablution rooms	2	Drain choked	1
Inadequate ventilation	3		

INFECTIOUS DISEASE.

There were in all 1,953 cases of infectious disease removed to, or treated in, the various hospitals, and 67 cases were removed to the Reception House. In addition, 160 cases of marasmus were treated in the City Hospital. The number of cases of infectious disease supervised at home was 3,371. The most prevalent infectious diseases were measles and whooping-cough, of which diseases there were 1,322 and 933 cases respectively. There were 712 cases of scarlet fever, 497 of acute primary pneumonia, 432 of diphtheria, 362 of German measles, 266 of chicken-pox,

124 of erysipelas, 59 of ophthalmia neonatorum, 40 of typhoid and paratyphoid, 39 of acute influenzal pneumonia, 18 of puerperal fever, 15 of dysentery, 9 of epidemic encephalitis, 5 of acute poliomyelitis, 4 of malaria, 1 of epidemic cerebro-spinal meningitis, and 1 of small-pox.

The usual notices were in every case served under Section 50 (2) and Section 53 (2) of the Public Health (Scotland) Act, 1897.

There were 4,417 intimations made to school teachers, 4,449 houses and 4,714 sets of clothing and bedding disinfected, and 411 chaff beds destroyed.

INTERMENTS.

Applications were received in 21 cases under Section 69 of the Public Health (Scotland) Act, 1897, to bury unclaimed bodies or the bodies of persons whose relatives were unable to do so, as compared with 31 applications in 1924, 21 applications in 1923, 47 in 1922, 25 in 1921, and 18 in 1920.

Sixteen of the applications were granted, at a cost to the Department of £38 5s. 6d., of which £4 4s. 11d. was refunded by relatives.

The ages of the interred were:—9 under one year of age, 2 between one and twelve years of age, and 6 from twelve years of age and upwards.

Fourteen of the interments were carried out in Trinity Cemetery, and two in the Grove Cemetery.

PROSECUTIONS.

Particulars as to the prosecutions instituted by the Department in the course of the year will be found in Appendix V.

I am, Gentlemen,

Your obedient servant,

JAMES CUMMING,

Sanitary Inspector.

APPENDIX I.

STATEMENT OF PROCEEDINGS UNDER THE PUBLIC HEALTH AND OTHER ACTS
DURING 1925.

	Number.
Subordinate Sanitary Inspectors employed,	12

I.—NUISANCES.

Complaints received,	3,365
Intimations under Section 19,	6,883
Notices served under Section 20,	464
Cases in which Legal Proceedings were taken,	7
Cases in which Legal Proceedings were successful,	7

II.—WORKSHOPS.

Inspections,	2,405
Notices served under Section 2 (3) of Factory and Workshop Act, 1901,	304
Cases in which Legal Proceedings were taken,	0

III.—TENTS AND VANS.

Inspections,	66
------------------------	----

IV.—UNDERGROUND DWELLINGS.

Reported to Local Authority,	0
Notices to Owners (Section 74),	0

V.—COMMON LODGING-HOUSES.

On Register at 31st December, 1925,	2
*Common Lodging-Houses belonging to the Local Authority,	1
Inspections between 8 a.m. and 10 p.m.,	26
Inspections between 10 p.m. and 8 a.m.,	24
Intimations of Irregularities sent to Keepers,	0
Cases of Infectious Disease reported to Medical Officer (Section 97),	0
Unregistered Premises dealt with,	0
Cases in which Legal Proceedings were taken (Breaches of Bye-laws, &c.),	0

* Meantime registered as a "House Let in Lodgings."

VI.—HOUSES LET IN LODGINGS.

On Register at 31st December, 1925,	39
Inspections,	679
Cases in which Legal Proceedings were taken,	0

VII.—INFECTIOUS DISEASES.

Visits of Inquiry, &c.,	14,677
Patients removed to Hospital,	1,734
Persons removed to House of Reception,	67
Notices served under Section 50 (2), \	
Notices served under Section 53 (2), /	3,624
Intimations to Education Authorities, Teachers, &c.,	4,417
Houses and Premises disinfected,	4,449
Sets of Clothing, Bedding, &c., disinfected or destroyed,	4,714
Cases in which Legal Proceedings were taken,	0

IX.—DAIRIES, COWSHEDS, AND MILKSHOPS.

X.—SLAUGHTER-HOUSES AND OFFENSIVE TRADES.

XI.—UN SOUND FOOD.

XII.—SALE OF FOOD AND DRUGS ACTS.

XIII.—CONDENSED MILK REGULATIONS.

XIV.—DRIED MILK REGULATIONS.

Samples procured for Analysis,	15
Certified to be Genuine,	15
Certified to be Adulterated,	0
Cases in which Legal Proceedings were taken,	0
Cases in which Legal Proceedings were successful,	0

XV.—RAG FLOCK ACT, 1911.

	Number.
Samples procured for Analysis,	13
Certified to conform to Board's standard,	12
Certified not to conform to Board's standard,	1
Cases in which Legal Proceedings were taken,	1

XVI.—BYE-LAWS.

Inspections in carrying out Bye-laws relating to—

(a) Pig-styes,	219
(b) Other sanitary matters,	0

APPENDIX II.

DETAILS OF WORK DONE DURING YEAR.

A—Drainage.

Defective drains made good	35
Drains properly ventilated	2
Additional water-closets fitted up	21
Water-closets fitted up in lieu of privies	2
Defective water-closets replaced	20
Defective water-closets repaired	70
Soil-pipes of water-closets renewed or repaired	8
Ventilation pipes renewed or repaired	8
Water-closet cisterns repaired	142
Overflow pipes from cisterns repaired	8
Pulls for cisterns provided	17
Defective flushpipes repaired	73
Basins of water-closets replaced or repaired	42
Additional water supplies provided for water-closets	5
Additional sinks provided	3
Defective sinks replaced or repaired	22
Defective wash-hand basins replaced	7
Water supply pipes repaired	53
Water taps repaired	10
Defective bath replaced	1
Waste or rain-water pipes replaced or repaired	147
Lead traps provided for waste-pipes	2
Defective grid traps replaced	5
New gratings provided for grid traps	36
New gratings provided for fresh air inlets	6
Additional eaves gutters and rain-water pipes fitted up	4
Eaves gutters renewed or repaired	183
Defective inspection covers renewed	29
New cover provided for intercepting trap	1
Choked drains and pipes cleared out	1,057
Choked water-closets cleared out	160

B—Structural Defects, &c.

Accumulations of ashes, filth, and other rubbish removed	294
Accumulations of stagnant water removed	18
Privies provided with pails	4
Accumulations of manure removed	29
Courts paved	2
Passages paved	28
Bleachgreens re-surfaced	3
Courts repaired	49
Passages repaired	43
Unsuitable apartments disused as sleeping apartments	5
Overcrowding abated	32
Enclosed beds opened up	4
Improved window ventilation for dwelling apartments	19

Broken sashcords renewed	76
Broken quadrants renewed or repaired	19
Sash fasteners repaired or renewed	14
Windows of dwelling apartments reglazed or repaired	156
Roof-lights of dwelling apartments reglazed or repaired	10
Windows or roof-lights of lobbies or staircases reglazed or repaired	161
Windows or roof-lights of drying-lofts reglazed or repaired	5
Windows or roof-lights of water-closets reglazed	54
Windows or roof-lights of wash-houses reglazed	110
Additional ventilation provided for water-closets	6
Additional ventilation provided for privies	3
Additional ventilation provided for wash-houses	7
Additional ventilation provided for staircase	1
Walls of dwelling-houses repaired	15
Walls of dwelling-houses re-harled or re-pointed	16
Window rybats re-pointed	36
Damp dwelling-houses remedied	39
Roof coverings of dwelling-houses repaired	53
Plaster on walls and ceilings of dwelling-houses repaired	149
Plaster on walls and ceilings of lobbies and staircases repaired	730
Plaster on walls and ceilings of pends and passages repaired	49
Plaster on walls and ceilings of water-closets repaired	370
Plaster on walls and ceilings of wash-houses repaired	202
Walls and ceilings of dwelling apartments whitewashed or repapered	109
Walls and ceilings of lobbies and staircases whitewashed or otherwise cleaned	1,593
Walls and ceilings of passages whitewashed	423
Walls and ceilings of private pends limewashed	44
Walls and ceilings of bathrooms cleaned	6
Walls and ceilings of water-closets whitewashed	3,487
Walls and ceilings of privies cleaned	15
Walls and ceilings of wash-houses whitewashed	1,783
Walls and ceilings of drying-lofts whitewashed	58
Floors of dwelling apartments repaired	56
Floors of lobbies, landings, and stair-steps repaired	148
Wash-houses repaired—	
Roofs	110
Walls	32
Floors	43
Doors	30
Tubs	42
Gantries	11
Brickwork of boilers	126
Furnaces	43
Boilers repaired or renewed	29
Boiler lids repaired or renewed	29
Flues	23
Windows	139
Water-closet apartments repaired—	
Roofs	84
Walls	41
Floors	13
Doors	84
Seats	110
Windows	75

Cellars repaired—

Roofs	389
Walls	68
Floor	1
Doors	86
Locks	2
Locks for water-closet apartments provided or repaired	68
Water-closet apartment opened up	1
Woodwork around sinks renewed or repaired	76
Defective chimneys repaired	21
Grates and fire-places repaired	64
Doors of dwelling-houses repaired or provided	69
Door furniture renewed or repaired	91
Mantel shelves repaired	10
Woodwork of cupboards repaired	12
Window blinds repaired or renewed	7
Stair handrails or balustrades repaired or renewed	27
Linoleum coverings of lobbies, stairsteps, &c., repaired or renewed	45
Clothes poles renewed or repaired	8
Boundary walls repaired	13
Palings repaired	25
Back courts and areas cleaned	36
Passages cleaned	31
Entrance lobbies, stairsteps, and landings cleaned	58
Floors, seats, and basins of water-closets cleaned	103
Floors of wash-houses cleaned	6
Floors of drying-lofts cleaned	16
Sinks cleaned	6
Floors of dwelling apartments cleaned	111
Dwelling apartments in which articles of furniture were cleaned	99
Sets of bed and body clothing cleaned	99
Nuisances caused by domestic animals abated	118
Offensive smells in dwelling apartments abated	21
Houses cleared of bugs	67
Stable repaired	1

C—Smoke Abatement.

(a) Factories, &c.—

Number of observations made	116
Number of cases where notices were served or warnings given	9
Number of prosecutions	1

(b) Steam Wagons—

Number of observations made	3,042
Number of cases where warnings were given	10
Number of prosecutions	1

(c) Railway Engines—

Number of observations made	274
Number of cases where warnings were given	19

D—Pig-Styes.

Walls and ceilings of pig-styes limewashed	266
Walls and ceilings of boiling-houses limewashed	25
Walls of pig-styes repaired	4
Roofs of pig-styes repaired	8

Floors of pig-styes repaired	50
Floors of boiling-houses repaired	4
Doors of pig-styes repaired	12
Partition walls repaired	32
Boiling-house repaired	1
Courtyards repaired	4
Passages repaired	8
Manure pit repaired	1
Feeding troughs repaired or renewed	27
Floors of pig-styes cleaned	15
Floors of boiling-houses cleaned	3
Additional bedding provided	3
Surface of runs cleaned	2
Courtyards cleaned	8
Passages cleaned	2
Cesspools emptied	4
Accumulations of manure removed	12
Accumulations of rubbish removed	2
Windows and roof-lights reglazed	11
Choked drains cleared out	2

E—Workshops.

On register at beginning of year	765
Added during year	57
Closed during year	63
Converted into factories	15
On register at end of year	744
Number of visits paid	2,237
Walls and ceilings of workshops limewashed or otherwise cleaned	86
Walls and ceilings of water-closets limewashed or otherwise cleaned	31
Staircases or passages limewashed	6
Basins of water-closets cleaned	33
Floors of water-closets cleaned	23
Seats of water-closets cleaned	12
Wash-hand basin cleaned	1
Floors of workshops cleaned	4
Floors of cloakrooms cleaned	2
Windows cleaned	13
Floors of staircases or passages cleaned	9
Roofs of workshops repaired	3
Seats of water-closets repaired or renewed	4
Doors of water-closets repaired	9
Roofs of water-closets repaired	3
Defective water-closets repaired	13
Lock provided for water-closet	1
Choked drains or pipes cleared out	19
Additional privies provided	2
Privy cleaned out	1
Additional water-closet accommodation provided	1
Sashcord renewed	1
Additional means of ventilation provided for workshops	2
Means provided for conveying gas fumes into chimneys	5
Floors of workshops repaired	5
Windows reglazed or repaired	6

Courtyards repaired	4
Courtyards cleaned	12
Accumulations of rubbish removed	34
Accumulations of manure removed	8
Accumulations of fish offal removed	15
Overcrowding abated	1
Other complaints removed	28

F—Bakehouses.

On register at beginning of year	79
Added during year	8
Closed during year	5
On register at end of year	82
Number of visits paid	330
Bakehouses limewashed	65
Glazed walls cleaned	12
Pastry rooms limewashed	7
Stores or cellars limewashed	39
Water-closets limewashed	31
Passages and staircases limewashed	10
Cloakrooms limewashed	6
Floors of bakehouses cleaned	24
Floors of stores cleaned	15
Floors of pastry rooms cleaned	9
Floors of cloakrooms cleaned	4
Stairsteps and passages, &c., cleaned	6
Floors of water-closets cleaned	16
Basins of water-closets cleaned	20
Seats of water-closets cleaned	16
Windows cleaned	11
Sinks or wash-hand basins cleaned	9
Ovens and hot-plates cleaned	4
Baking machines cleaned	16
Steam presses cleaned	20
Bakehouse tables cleaned	22
Baking utensils cleaned	44
Bread boxes cleaned	8
Shelves cleaned	9
Woodwork of doors cleaned	26
Courtyard cleaned	1
Additional ventilation provided for bakehouse	1
Baking tables repaired	2
Locks of water-closet doors repaired	3
Defective water-closets repaired	2
Floors of bakehouses repaired	4
Cords provided for windows and roof-lights	3
Seats of water-closets repaired	4
Plaster on walls and ceilings of bakehouses repaired	6
Plaster on walls and ceilings of flour stores repaired	3
Windows repaired or reglazed	8
Accumulations of rubbish and manure removed	11
Cloakroom accommodation provided	1
Covers provided for food receptacles	4
Suitable receptacles provided for storing fuel	3

Nuisance caused by domestic animals abated	1
Nuisances caused by flies remedied	2

G—Milkshops.

Walls of milkshops cleaned	96
Ceilings of milkshops cleaned	100
Walls of back rooms cleaned	86
Ceilings of back rooms cleaned	78
Walls of staircases to basements whitewashed	3
Walls of cellars whitewashed	11
Windows cleaned	4
Doors cleaned	6
Shelves, counters, and other fittings cleaned	42
Sinks cleaned	4
Boiler cleaned	1
Woodwork of sinks cleaned	8
Milk vessels cleaned	9
Stairsteps cleaned	2
Floors cleaned	35
Floors, seats, and basins of water-closets cleaned	7
Doors communicating with common lobbies closed up	16
General cleanliness improved	57
Window area cleaned out	1
Floor coverings renewed or repaired	52
Counter coverings renewed or repaired	6
Floors repaired	18
Doors repaired	2
Plaster repaired	6
Shelves repaired or provided	4
Milk vessels renewed	7
Covers for milk vessels renewed or provided	23
Covers for milk vessels repaired	7
Warnings given regarding covers not being used	62
Wash-tubs provided	2
Boilers provided	6
Sinks provided	4
Additional water supply provided from main	1
Woodwork of sinks repaired	4
Windows reglazed	12
Improved ventilation provided	18
Offensive smells abated	3
Manure pits emptied	2
Accumulations of rubbish removed	29
Courtyards cleaned	4
Milk carts cleaned or repainted	3
Milk barrows cleaned	2
Other complaints removed	20

H—Food Shops.

Walls and ceilings of shops cleaned	87
Walls and ceilings of back rooms cleaned	69
Walls and ceilings of staircases cleaned	3
Walls and ceilings of cellars cleaned	27
Walls and ceilings of water-closets cleaned	23

Floors of shops cleaned	17
Floors of cellars cleaned	11
Stairsteps cleaned	4
Floors, seats, and basins of water-closets cleaned	23
Sinks cleaned	8
Fittings cleaned	17
Windows cleaned	9
Door cleaned	1
Additional ventilation provided	2
Plaster on walls and ceilings repaired	19
Counters repaired	6
Floors repaired	8
Stairsteps repaired	1
Floor coverings repaired or renewed	36
Woodwork around sinks repaired	7
Windows of shops reglazed or repaired	4
Roof-light of water-closet reglazed	1
Sashcords renewed	3
Sink renewed or repaired	1
Waste-pipes repaired	4
Accumulations of rubbish removed	28
Wash-hand basin repaired	1
Other complaints removed	12

I—Places of Public Amusement.

Number of inspections	159
Cord for ventilators provided	1
Sashcords for windows renewed	9
Premises in which seats were cleaned	9
Premises in which seats were repaired	5
Floors of halls cleaned	5
Floors of dressing-rooms cleaned	5
Floors of passages cleaned	6
Walls of halls cleaned	14
Walls of heating chamber cleaned	1
Walls and ceilings of dressing-rooms cleaned	16
Walls and ceiling of tea room cleaned	1
Walls and ceilings of staircases and passages cleaned	20
Walls and ceilings of water-closets cleaned	40
Walls and ceilings of urinals cleaned	11
Basins of water-closets cleaned	9
Wash-hand basins cleaned	3
Urinal stalls cleaned	2
Floor coverings renewed or repaired	6
Water-closet repaired	1
Windows repaired or reglazed	10
Window curtains cleaned	4
Plaster on walls and ceilings repaired	8
Choked drains or pipes cleared	3
Accumulations of rubbish removed	5
Locks of water-closet doors repaired or renewed	3
Additional ventilators provided for waiting room	1
Other complaints removed	7

APPENDIX III.

INSPECTIONS OF FOOD.

NUMBER AND PLACE OF INSPECTIONS OF FOOD DURING YEAR 1925.

Fish Market,	315	Fleshers' Shops,	46
Shipping Sheds,	226	Fruiterers' Shops,	2
Fish-curing Premises,	912	Restaurants,	1
Slaughter-houses,	3,905	New Market Hall,	273
Meat Marts,	1,904	Street Markets,	147
Provision Curing Works,	216	Other Premises,	2,464
Grocers' Shops,	22	Total,	10,645
Fishmongers' Shops,	7		
Wholesale Warehouses,	205		

UN SOUND FOOD SEIZED OR DESTROYED DURING YEAR 1925.

	No. of Seizures	WEIGHT IN LBS.									
		Beef.*	Veal.*	Mutton*	Pork.*	Offal.	Game.	Poultry.	Ham.	Tinned Foods.	Fruit. Fish.
Jany.,	129	22,055	38	411	785	922	...	...	...	933	500
Feby.,	124	18,258	...	1,043	805	1,271	...	...	...	849	140
March,	143	26,031	...	531	1,482	1,303	...	7	...	584	...
April,	139	18,599	106	389	565	1,429	120	...	...	582	4,613
May,	157	23,327	56	297	238	1,627	...	...	...	673	2,958
June,	119	17,046	200	235	280	1,452	...	...	...	562	4,268
July,	149	20,137	55	311	515	2,158	20	...	...	13,232	130
August,	123	20,251	68	443	838	1,449	...	...	30	558	400
Sept.,	104	20,075	130	341	799	632	...	...	...	1,056	27
Oct.,	126	21,371	466	504	958	1,081	...	...	...	580	...
Nov.,	127	24,038	...	683	787	1,070	243	...	...	818	...
Dec.,	112	20,357	121	203	599	784	...	...	...	1,134	30,240
Totals,	1,552	251,575	1,240	5,391	8,651	15,178	383	7	30	21,561	42,349

* Including offal where forming only part of seizure.

FOOD INSPECTIONS.—SUMMARY FOR YEARS 1916 to 1925.

	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Number of Inspections,	11,100	11,370	10,433	10,416	9,828	10,080	8,507	8,123	9,654	10,645
Number of Seizures,	1,157	1,052	1,680	2,464	2,504	1,350	1,328	1,398	1,616	1,552
Weight of Food Seized (Tons),	399	96	173	270	272	133	156	132	177	155
Number of Cases dealt with by Magistrates, . . . . .	...	...	1	...	...	2	...	...	...	...
Legal Proceedings instituted, . . . . .	...	...	1	...	...	2	...	...	...	...
Fines Imposed, . . . . .	...	...	£5 18s. 6d.	...	...	£10 10s.	...	...	...	...

APPENDIX IV.

LIST OF REGISTERED WORKSHOPS IN ABERDEEN AT 31st DECEMBER, 1925,
WITH NUMBER OF EMPLOYEES.

Description of Workshop.	Number.	No. of Male Employees.	No. of Female Employees.
Agricultural Implement Maker,	1	—	—
Bakers,	39	37	57
Basketmakers,	3	12	—
Blacksmiths,	20	32	—
Bootmakers,	18	18	—
Bottlers,	9	26	23
Brushmaker,	1	1	—
Cartwrights,	2	2	—
Carvers (including Gilders),	2	1	2
Confectioners,	11	8	3
Coopers,	5	8	—
Corset Makers,	2	—	1
Cycle Repairers,	11	17	—
Dentists (Mechanical),	4	14	—
Embroiderer,	1	—	2
Engravers,	5	5	—
Fishcurers,	92	269	510
Fishdriers,	4	126	—
Fishing Net Makers,	7	19	64
Fish Packers,	81	205	70
Fish Box Washers,	14	31	—
Fishing Tackle Makers,	2	3	43
Florist,	1	—	5
Furniture, Makers of,	35	65	37
Furriers,	2	—	6
Gold Paint Manufacturer,	1	—	2
Golf Club Repairer,	1	1	—
Gut or Tripe Cleaner,	1	6	12
Health Salt Manufacturer,	1	—	2
Ham Curers,	1	1	—
Indiarubber Merchants,	2	1	2
Joiners,	12	12	—
Japanner,	1	2	—
Laundries,	6	1	35
Mattress Makers,	2	2	2
Milliners,	33	—	70
Motor Repairers,	7	16	—
Oil Manufacturer,	1	3	—
Optician,	1	1	—
Onion Bunching,	2	8	—
Painters (including Glass Stainers),	32	277	2
Paper Bag Makers,	2	—	27
Photographers,	12	4	27
Piano Repairers,	4	6	4
Picture Frame Makers,	9	16	2

Description of Workshops.	Number.	No. of Male Employees.	No. of Female Employees.
Plaster Casters and Tile Fixers,	4	5	—
Plumbers,	26	91	—
Rag and Metal Merchants,	10	16	19
Riggers,	3	14	—
Ropemakers,	2	5	—
Sackmaker,	1	3	—
Saddlers,	10	13	3
Sailmakers,	3	5	—
Saw Trimmers,	3	7	—
Scale Repairers,	2	5	—
Shirt Maker,	1	—	6
Stonecutters,	6	15	—
Sewing Machine Repairer,	1	2	—
Tailors,	110	166	206
Taxidermist,	1	—	1
Tinsmiths,	8	29	—
Typewriter Repairers,	2	2	—
Umbrella Repairer,	1	1	—
Undertakers,	4	11	5
Venetian Blind Maker,	1	—	—
Watchmakers and Jewellers,	15	19	—
Wearing Apparel, Makers of,	61	—	197
Wigmakers,	3	3	1
Wireworkers,	2	4	—
Totals,	783	1,674	1,448

Date.	Court.	Act.	Offence.	Penalty or Decision.
1925				
Feb. 1	Sheriff	Sale of Food and Drugs Acts	Selling milk containing not more than 2·68 p.c. fat .	Case withdrawn, letter of warning sent.
" 19	Do.	Do.	Supplying milk containing not more than 8·40 p.c. solids not fat	Penalty, £5.
" 19	Do.	Shops (Early Closing) Act, 1920	Selling biscuits beyond prescribed closing hour .	Penalty, 25s.
" 19	Do.	Do.	Shopkeeper and assistant selling biscuits and oatcakes beyond prescribed closing hour	Shopkeeper fined 5s., with 13s. 9d. of expenses; second offence. Assistant fined 13s. 9d. of expenses.
Mar. 23	Do.	Sale of Food and Drugs Acts	Supplying milk containing not more than 2·93 p.c. fat	Case withdrawn, letter of warning sent.
" 26	Do.	Do.	Selling margarine containing not less than 16·95 p.c. moisture	Penalty, 30s.
April 9	Do.	Do.	Supplying milk containing not more than 2·97 p.c. fat and 7·78 p.c. solids other than fat	Penalty, £8.
" 9	Do.	Do.	Selling milk containing not more than 2·85 p.c. fat .	Penalty, £2.
" 23	Do.	Shops (Early Closing) Act, 1920	Selling loaf bread and biscuits beyond prescribed closing hour	Penalty, 2s. 6d., with 25s. of expenses.
" 27	Do.	Sale of Food and Drugs Acts	Selling milk containing not more than 2·90 p.c. fat .	Penalty, £2.
" 27	Do.	Do.	Selling milk containing not more than 2·94 p.c. fat .	Penalty, £1.
" 30	Do.	Shops (Early Closing) Act, 1920	Selling cigarettes beyond prescribed closing hour .	Penalty, £3, with 25s. of expenses; third offence.
May 12	Police	Aberdeen Police and Improvement Act, 1900	Making ice-cream without being registered .	Penalty, 20s.
" 15	Sheriff	Sale of Food and Drugs Acts	Selling milk containing not more than 2·92 p.c. fat .	Penalty, £2.
" 15	Do.	Do.	Selling milk containing not more than 2·90 p.c. fat .	Penalty, £2.
" 15	Do.	Shops (Early Closing) Act, 1920	Selling biscuits beyond prescribed closing hour .	Penalty, £1.
" 21	Do.	Shops (Early Closing) Acts, 1920 and 1921	Selling ice-cream beyond prescribed closing hour .	Penalty, 25s.
" 21	Do.	Sale of Food and Drugs Acts	Selling butter containing not less than 23·52 p.c. moisture	Penalty, £3.
" 21	Do.	Do.	Selling milk containing not more than 2·75 p.c. fat .	Penalty, £3.
June 11	Do.	Do.	Selling milk containing not more than 2·85 p.c. fat .	Penalty, £3.
" 11	Do.	Shops (Early Closing) Acts, 1920 and 1921	Shopkeeper and assistant selling confectionery beyond prescribed closing hour	Shopkeeper fined 25s.; case against assistant deserted.
" 23	Police	Aberdeen Police and Waterworks Act, 1862	Permitting a choked drain to exist	Penalty, 20s.
" 25	Sheriff	Sale of Food and Drugs Acts .	Selling milk containing not more than 2·53 p.c. fat .	Penalty, £2.

PROCEEDINGS FOR CONTRAVENTIONS OF STATUTES—continued.

Date.	Court	Act.	Offence.	Penalty or Decision.
1925				
July 12	Sheriff	Sale of Food and Drugs Acts	Selling milk containing not more than 2·89 p.c. fat .	Penalty, £3.
" 30	Do.	Do.	Selling milk containing not more than 2·75 p.c. fat .	Penalty, £3.
" 30	Do.	Do.	Selling milk containing not more than 2·76 p.c. fat .	Penalty, £3.
" 30	Do.	Shops (Early Closing) Acts, 1920 and 1921	Selling aerated waters beyond prescribed closing hour	Penalty, 25s.
Aug. 6	Do.	Shops (Early Closing) Act, 1920	Selling magnifying glass beyond prescribed closing hour	Penalty, 30s.
" 8	Do.	Sale of Food and Drugs Acts .	Selling milk containing not more than 2·61 p.c. fat .	Penalty, £6.
" 11	Police	Aberdeen Police and Water-works (Amendment) Act, 1867	Two tenants failing to keep stair-steps in a cleanly condition	One tenant fined 5s., the other found "not guilty."
" 13	Do.	Smoke Nuisance Abatement Act, 1857	Using furnaces so negligently as that the smoke issuing therefrom was not effectually consumed or burnt	Charge found "not proven."
" 18	Sheriff	Sale of Food and Drugs Acts	Selling milk containing not more than 2·75 p.c. fat .	Penalty, £2.
" 18	Do.	Do.	Selling milk containing not more than 2·48 p.c. fat .	Penalty, £2.
" 18	Do.	Do.	Supplying milk containing not more than 8·15 p.c. solids not fat	Case withdrawn, as milk from cows found to be under standard.
" 20	Police	Shops (Early Closing) Acts, 1920 and 1921	Selling ice-cream beyond prescribed closing hour .	Penalty, 30s.
Sept. 10	Sheriff	Sale of Food and Drugs Acts .	Selling milk containing not more than 2·78 p.c. fat .	Penalty, £3.
" 10	Do.	Do.	Selling pork sausages containing not less than 21·20 grains of boron preservative per lb.	Case withdrawn ; letter of warning sent.
" 10	Do.	Do.	Selling pork sausages containing not less than 20·80 grains of boron preservative per lb.	Do.
" 10	Do.	Do.	Selling pork sausages containing not less than 39·00 grains of boron preservative per lb.	Do.
" 10	Do.	Shops (Early Closing) Act, 1920	Shopkeeper and assistant selling matches beyond prescribed closing hour	Shopkeeper fined 10s., with 29s. 6d. of expenses ; assistant admonished.
" 10	Do.	Shops (Early Closing) Acts, 1920 and 1921	Selling confectionery beyond prescribed closing hour .	Penalty, 2s. 6d.
" 10	Do.	Do.	Shopkeeper and assistant selling pears beyond prescribed closing hour	Penalty, 30s.
Oct. 1	Do.	Sale of Food and Drugs Acts .	Selling milk containing not more than 2·79 p.c. fat .	Penalty, £2.
" 1	Do.	Do.	Supplying milk containing not more than 2·90 p.c. fat	Penalty, £4.
" 8	Do.	Do.	Selling milk containing not more than 2·50 p.c. fat .	Case withdrawn, as milk from cows found to be under standard.
" 8	Do.	Milk and Dairies (Amendment) Act, 1922	Selling milk containing colouring matter	Penalty, £2 2s.

Date.	Court.	Act.	Offence.	Penalty or Decision.
1925 Oct. 8	Sheriff	Sale of Food and Drugs Acts.	Selling milk containing not more than 2·73 p.c. fat .	Case withdrawn, as milk supplied to accused was found under standard.
"	Police	Rag Flock Act, 1911 .	Supplying rag flock containing not less than 252·5 parts chlorine per 100,000	Penalty, £3.
"	Sheriff	Sale of Food and Drugs Acts .	Supplying milk containing not more than 2·63 p.c. fat	Case withdrawn, as milk from cows found to be under standard
Nov. 5	Do.	do.	Selling milk containing not more than 2·59 p.c. fat .	Case withdrawn; letter of warning sent.
" 12	Police	Locomotives Amendment (Scotland) Act, 1878	Owner and driver using a steam wagon which did not, so far as practicable, consume its own smoke	Owner fined £3; charge against driver deserted.
" 16	Do.	Aberdeen Police and Waterworks Acts, 1862	Tenant permitting an accumulation of offensive matter to remain in cellar	After offensive matter had been removed, accused was admonished
" 18	Sheriff	Sale of Food and Drugs Acts .	Supplying milk containing not more than 2·82 p.c. fat	Penalty, £2 10s.
Dec. 1	Do.	do.	Supplying milk containing not more than 2·92 p.c. fat	Penalty, £2.
" 17	Do.	do.	Selling whisky which was 1·20 degrees under the strength stated in the notice affixed to the receptacle	Penalty, £3.
" 19	Police	Public Health (Scotland) Act, 1897	Eight tenants failing to keep seat and basin of W.C. in a cleanly condition	All fined, 5s.
1926 Jan. 29	Do.	Aberdeen Police and Waterworks (Amendment) Act, 1867	Failing to whitewash entrance staircase, wash-house, and W.C.	Penalty, 30s.
Feb. 10	Do.	do.	Failing to whitewash lobby and staircase . . .	Penalty, 20s.
" 25	Do.	do.	Failing to whitewash lobby, staircases, W.C. and wash-house	Penalty, 30s.
" 25	Sheriff	Shops (Early Closing Acts, 1920 and 1921	Stall-holder and assistant selling apples and pears beyond prescribed closing hour	Stall-holder fined 5s. with 13s. 9d. of expenses. Assistant fined 13s. 9d. of expenses.
" 25	Do.	Shops Act, 1912 . . .	Failing to give four shop-assistants the prescribed "tea interval," and failing to exhibit the "half holiday" and "young persons" notices	Penalty, £3, with 27s. 6d. of expenses.
" 25	Do.	Shops (Early Closing) Act, 1920	Shopkeeper and assistant selling sugar and biscuits beyond prescribed closing hour	Penalty, 30s.
" 25	Do.	do.	Selling fire-works beyond prescribed closing hour .	Penalty, 25s.
" 25	Do.	Shops (Early Closing) Acts, 1920 and 1921	Selling confectionery beyond prescribed closing hour .	Penalty, 25s.

PROCEEDINGS FOR CONTRAVENTIONS OF STATUTES—*continued*.

Date.	Court.	Act.	Offence.	Penalty or Decision.
1926				
Feb. 25	Sheriff	Shops (Early Closing) Acts, 1920 and 1921	Selling confectionery beyond prescribed closing hour.	Penalty, 15s. with 25s. of expenses ; second offence.
" 25	Do.	Shops (Early Closing) Act, 1920	Shopkeeper and assistant selling tea and bread beyond prescribed closing hour	Shopkeeper fined 25s. of expenses. Assistant admonished.
" 25	Do.	Shops Act, 1912 . . .	Restaurant proprietor and managers failing to give three assistants the prescribed weekly half holiday and meal intervals, and employing a "young person" in each of two weeks for more than 74 hours	Each fined 30s. with 27s. 6d. of expenses.
April 8	Do.	Shops Act, 1912 . . .	Failing to give shop assistants the prescribed meal intervals	Penalty, 10s. with 37s. of expenses.